

STUDIES OF  
CREATION AND LIFE

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GODET



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Studies of creation and life









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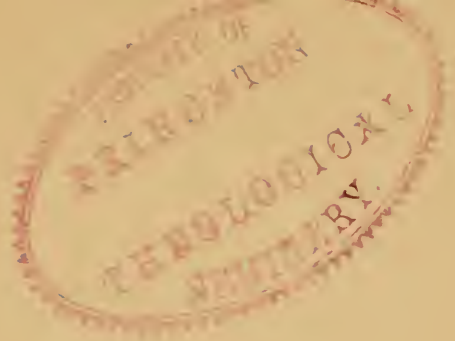
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## INTRODUCTION.

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THE author of the following Essays was, in 1843 and after, the preceptor of the Crown Prince of Prussia, and was and still is highly honored by the royal family. In his present professorship in the college at Neûchatel, Switzerland, he has won a wide and high reputation as a thorough and acute student of the Scriptures, an original thinker, and a very suggestive and inspiring writer. He is best known to American readers by his *Biblical Studies*. These Essays first appeared, at different dates since 1864, in the *Revue Chretienne* and *Chrétien Evangélique*. Some of them, revised by the author, were translated by Mrs. E. Littelton and under the editorship of her husband, the Hon. and Rev. W. H. Littelton, rector of Hagley, England, were published in two separate volumes in London, in 1868 and 1879.

No American reprint of Prof. Godet's *Studies* has, to our knowledge, appeared. But their originality, rich suggestiveness and tender Christian spirit deserve and ought to give them a wide circulation. The present selection is a tentative volume; to be followed by other essays if a demand shall require it. It includes topics especially pertinent to the present themes of popular discussion; and

most attractively written for the reading of young people who desire to know the conclusions of one of the keenest and clearest thinkers.

In reply to a letter stating the wish of the Congregational Sunday-School and Publishing Society to issue an American edition of some of his *Studies*, and inquiring particularly if his theological and scientific investigations for the past ten years since their publication had modified any of his conclusions, especially in his *Study of the Creation*, Prof. Godet writes, April 15, 1882: "I cannot at this moment know how to give the labor of a revision. And if I had the time for it, the changes which I might suggest would be without any importance," and he kindly adds: "Since it is in a religious work that the Society is engaged, I surrender cheerfully all rights of authorship." \* We have the assurance, therefore, that these *Studies* express the latest religio-scientific theories. At a later date, July 13, Prof. Godet has sent a note to be added to his essay upon the *Creation*, which will be found in its proper place.

These *Studies* are commended to the thoughtful study of any who may be perplexed by plausible speculations upon the origin of things as a reasonable solution of their difficulties.

\* "Pour moi, je ne puis en ce moment savoir ce travail et le modifier. Et si j'en avais le temps, les changements que j'y apporterais seraient sans importance. Puisque c'est dans un but religieux que travaille la société, au nom de laquelle vous m'écrivez, j'abandonne sans peine tous droits d'auteur." -- *Letter of April 15, 1882.*

# STUDIES OF CREATION AND LIFE.

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## THE SIX DAYS OF CREATION.

**A**MONG all the records of Holy Scripture none has been more variously estimated than that of the Creation, with which the Book of Genesis opens. Cuvier, the founder of the science of palæontology, expresses himself as follows: "Brought up in all the wisdom of the Egyptians, but in advance of his age, Moses has left us a cosmogony, of which the accuracy verifies itself every day in a marvellous manner. Recent geological researches are in perfect agreement with the Book of Genesis as to the order in which organized beings were successively created."\* On the other hand, one hears men of science declaring it henceforth impossible to establish any agreement between the facts of geology and the picture given us in the Bible. According to them, we must consider this narrative either as the product of an ancient tradition, or as the result of philosophical speculation; in either case, as a composition of purely human origin. And if we descend to more popular literature, we find such sentiments as these: "Accept the Bible as the rule of belief! Must we then believe with Genesis, that God, after having created the light on the first day rested for three nights before He produced the

\* *Discours sur les révolutions du globe.*

stars which transmit it to us? that the herbs of the field and the trees of the forest, created on the third day, can have grown without the heat of the sun, moon and stars, which were not created till the fourth day?"\* Had the narrative of Genesis its origin simply in human tradition? But men hand down to one another, by means of traditional records, the facts of which they have been witnesses. Now, if it is true that man was present to the mind of God during this work of creation, as the end and object of all this great labor, it is equally true that no human eye contemplated this unique spectacle, and that no human tongue can have related its phases; "Where wast thou," says the Eternal One to Job, "when I laid the foundations of the earth? and when the sons of God shouted for joy?"† Was this picture, then, the offspring of philosophy? But the idea of a creation, animal or vegetable, anterior to man, and developed in regular course through its diverse phases, had never entered the mind of any ancient philosopher. The very notion of *creation*, properly so called, is foreign to all ancient thought.

These considerations bring us back to the idea which has pressed itself upon many scientific minds of the first rank: — it is, that as we contemplate this picture we may be really in the presence of a Divine revelation. What then? has God really spoken to men? Did He bring it about that one of their race should be a spectator of some of those scenes which preceded the existence of man here below? If so, in what form can such a communication have been made to him? And in what relation do its contents stand to the actual results of science? These are the important but difficult questions which we now propose to examine.

\* *Le Progrès, organe des libéraux du Jura*, 15 Mars, 1872.

† Job xxxviii. 4, 7.

## I.

## REVELATION.

DOES the Jewish monotheism rest upon a revelation? Is the history of Israel, as a whole, a Divine work, designed as a preparation for that moral creation which Jesus Christ came to effect, and in foresight of which the first creation had already been completed? And may we suppose the special revelations accorded to the patriarchs and to the Jewish prophets to have been the commentary which accompanied this educational work, since all education should rest upon instruction? It is in this light that the Bible represents to us the Divine revelations of which it gives an account. "*Shall I hide* from Abraham," God says to Himself, "shall I hide from Abraham that thing which I do?"\* When it is God's purpose to accomplish here below a consecutive work, must He not of necessity, unless He is to work an infinite series of miracles, associate with Himself a certain number of free agents, who shall co-operate with Him? For that end He must first draw them to Himself; then, in order that they may work intelligently and freely, He must initiate them into His plan, so far at least as they are to participate in its fulfilment; which presupposes one or more acts of revelation.

One of the prophets expressed in the following words this fact, of which he felt himself the living proof: "Can two *walk together* except they be *agreed*? . . . surely the Lord God will do nothing, but He *revealeth* His secret unto His servants the prophets."†

Some have tried to explain the Jewish monotheism, and all the train of convictions and hopes which accompany it,

\* Gen. xviii. 17.

† Amos iii. 3, 7.

by an *instinctive tendency* in the Semitic family,\* or by the natural development of the human conscience, which should have taken place more rapidly in that race than in any other. But the illustrious writer who, in our time, has scrutinized more deeply than all others the secrets of the intellect and the conscience of man, by the help of the indications offered by language, M. Max Müller, has, in a masterly manner, refuted this naturalistic theory.

“Is it possible to hold,” he says, “that a monotheistic instinct can have been bestowed upon all those nations who worshipped Elohim, Jehovah Sabaoth, Moloch, Nisroch, Rimmon, Nebo, Dagon, Ashtaroth, Baal, Baal-peor, Beelzebub, Chemosh, Milcom, Adrammelech, Anamelech, Nibhaz and Tartak, Ashima, Nergal, Succothbenoth, the sun, the moon, the planets, and all the stars of the firmament?” † All these names of divinities belong in fact to the pantheon of the *Semitic* tribes. The same author again reminds us that it is not allowable to argue from the example of an Abraham, a Moses, an Elias, a Jeremiah, that such was the general tendency of the Jewish people, since it is a fact “that this nation provoked many a time the anger of the Lord, by offering incense to other gods.” ‡ History attests that Israel was inclined to the same polytheism, whether of a refined or gross kind, into which all the other nations fell; and that it needed a continuous effort on God’s part, carried on through the instrumentality of a small number of chosen men, and by a very severe discipline effecting itself often by the most rigorous dispensations, to compel this race to resist the downward current of idolatry, in which it was by nature being carried away like all others.

\* M. Renan.

† *Essais sur l’histoire des religions*, par Max Müller, traduit par Georges Harris, 1872, p. 469.

‡ Müller, p. 472, 473.

Doubtless we must admit a primordial and natural revelation to the human consciousness of the existence and of the essence of the Godhead. But, as M. Müller observes, "this first intuition of God is neither monotheistic nor polytheistic. . . . It finds expression in this article of faith: *God is God*, or *there is a God*; which does not as yet imply that there is *one only* God."\* This last formula, which contains in itself an express denial of polytheism, goes beyond the contents of natural revelation. How are we to explain the fact that the people of Israel alone were in possession of this knowledge, and made it the basis of their national existence? Was this people gifted with high philosophic genius? By no means. M. Max Müller here reminds M. Renan of his own statements, in which he denies to the Semitic nations "even that *minimum* of religious reflection which is necessary for the perception of the Divine unity."\*

Inasmuch as it is historically certain that all nations have raised themselves, by virtue of the religious organ with which the human soul is endowed, to faith in Deity in general, so is it equally true that Israel alone has reached to the conception of the *unity* of that Deity which is so universally affirmed. So M. Müller concludes by saying plainly: "perhaps we shall be asked how it came to pass that Abraham had not only that primordial intuition of Divinity, which is common to the whole race, but had attained to the knowledge of the one only God, — denying the existence of all other gods; *we are ready to reply that it was owing to a special Divine revelation.* ‡ We are not here making use of the conventional language of theology; we wish to give the term we employ its full and complete meaning. The Father of all truth chooses His prophets, and speaks to them in a

\* Müller, pp. 479, 481.

† Ibid., p. 475.

‡ Ibid., p. 505 (the *italics* are our own).

voice louder than thunder. . . . We cannot admit that the expression Divine *instinct* is the fittest to use in describing a grace or a gift granted only to a small number of mankind, nor that it is more scientific, that is, more intelligible, than that of *special revelation*.”\* See in the prairie that troop of wild horses disporting themselves at liberty. Not one of them has ever felt the painful pressure of the bit, nor the overmastering hand of a strong and skilful rider. Suddenly there appears in the midst of them another horse, with disciplined paces, well-knit limbs, and measured, yet rapid gallop. On his back is a rider, whose hand is armed with the terrible lasso. He pursues these young, untamed horses, throws the lasso, entangles them in the fatal noose, and carries them away captive to his stud, where they are in their turn put under training. Thus it was that Jehovah, even while *leaving the nations to walk after their own ways*, prepared, and, as it were, trained for Himself in Israel a people, by means of whom it was His purpose, when the fulness of time should come, to draw all others to Himself. Had He not said beforehand to Abraham, when he chose him to be his servant, and his posterity to be his people : “ *in thee shall all families of the earth be blessed?* ”

Among all those whom God called to work with Him in this special training of the Jewish nation Moses holds without doubt the first place. It was through him that the patriarchal revelation became a national religion and received its historic character. It was through him that it disengaged itself completely from those elements of polytheism which still clung to it among the children and descendants of Abraham himself. It was through him that the name, already known but not generally used, Jehovah, was substituted for the ancient name *El Shaddai, the Almighty*, by which they had before addressed the God who revealed Himself

\* Müller, pp. 505, 506.

to the Father of the race, — the name by which God had most frequently designated Himself in addressing the patriarchs. This substitution was nothing less than the starting-point of a great religious revolution. The name *El Shaddai*, the Almighty, left room for the existence of other powers by the side of God, subject, indeed, to His supremacy, but still able in some sort to compete with Him. This name signifies nearly the same as that which a certain class of religious persons still like to use; *the Being of beings*, the *Supreme Being*. But *Jehovah* signifies *He who is and shall be*. Jehovah, therefore, does not only mean *the most powerful* of beings, but the one *only* self-existent Being; the absolute Being, absorbing in Himself the idea of existence; the Being existing by his own Power; the Being as subject, noun and attribute in one. By the side of El Shaddai there is room for others inferior to Him; outside of Jehovah there is but nonentity. If anything *does* exist outside of Him, it is only through His power, and in consequence of His creative will. The worship of El Shaddai did not then expressly include polytheism. But the adoration of Jehovah is, in its principle, what it has become more and more in fact, the absolute divorce of the conscience from all forms of paganism, actual or conceivable. We have in Exod. iii. and vi. the simple and solemn narrative of the vision granted to Moses, in which God for the first time revealed himself in the character of Jehovah. At that moment was laid the foundation of the Jewish monotheism,\* and of the definitive religion of mankind. But it was not only against polytheism but against its hidden principle, materialism, theoretical and practical, that the worship of Jehovah was to be thenceforth

\* Exod. vi. 2, 3: "And God spake unto Moses, and said unto him, I am the LORD. And I appeared unto Abraham, unto Isaac, and unto Jacob, by the name of *God Almighty* (El Shaddai), but *by My name* JEHOVAH was I not known to them."

an insuperable barrier. In presence of the self-existent Being, the independent I AM, absolute, perfectly conscious of and master of Himself\* — of Him who is that which He wills to be, and because He so wills, just as truly as He wills to be that which He is, and because He is such, — how could Matter claim to possess any self-determining existence whatever? This obscure principle, akin to fate un-selfconscious, — this brute fact without will and impenetrable by intelligence, this amorphous essence which all nations, and indeed all the wise men of old, regarded as co-existing eternally with God and independent of Him, if not in form, at least in substance, — this uncreated matter is at once and forever set aside by the revelation of God as Jehovah, *I am*.† Not only every individual being, but even the substance out of which every being is formed, has no existence but that which it pleases the free will of God to give it. And here we have the idea which was to serve as the foundation for the establishment of the kingdom of God upon earth. With this sublime conception, the reign of real spiritualism, of holiness, was founded in the heart of humanity.

Does matter exist eternally and by itself? That, in the universe, which resists all the efforts of God to subdue it to Himself, how should it not defy all our endeavors to gain the mastery over it in ourselves? It hinders forever the designs of the Creator, whose will it is to realize on this earth the perfect Good, — the ideal of the True, the Just, the Beautiful, — and who fails to reach his object because He meets in matter an insuperable limit to his beneficent action; and shall we, poor feeble human beings,

\* Exod. iii. 14: "*I am that I am*." This is the grammatical paraphrase of the name Jehovah; this name is in the future. [See French Bible: "*je serai celui que je serai*." — TR.]

† "*I am*" (as a proper name) "has sent me unto you."

claim the power to realize the ideal of morality, notwithstanding the resistance of flesh and blood? God, according to this, has had to limit Himself to the *arranging* of matter as well as possibility allowed, and the world, notwithstanding the Divine breath which He infused into it, is for him but a *pis-aller*; and can He require of me that, in my small sphere, I should do better than He? No, if the power of matter is insuperable in the great All, it must be so also in my individual life. Let us, then, break ourselves of the folly of wishing to subjugate our senses! Let us obey without scruple the blind power before which even the Divine Majesty itself must bow! And since it must be so, let brute nature reign in the lower regions of human life!

It needs no great effort of intelligence to understand the logic which, from the principle of the eternity of matter, deduces practical materialism, the excesses of sensuality, and degradations of egoism. This is the fatal extreme to which man is driven, when not enlightened by the revelation of Jehovah. The picture which S. Paul has drawn of the life of the nations of antiquity,\* is a frightful testimony to the irresistible force of this logical and moral chain of consequences.

Opposite to this incline, down which all the pagan nations, ancient and modern, are step by step descending, we see another, up which one nation, one alone, is gloriously ascending; which, in the Person of its last and supreme representative, succeeds at last in realizing the purest spirituality, absolute holiness. By the fruit we can recognize the tree, or, if you will, the root. This name Jehovah, inscribed by Moses in letters of fire on the Jewish consciousness—it is this which has worked this prodigy. It dissipated for Israel the seductive charm of a sensual

\* Rom. i.

life, and secured the preponderance of spirit over matter. If God alone exists, and matter only through Him, it must be entirely subject to Him. Man is no more a slave to it than God Himself. While spelling out the name Jehovah man has recovered the knowledge of his own greatness. Made in the image of this absolute Being, of this pure Spirit, he can and he must become like Him ; and henceforth the royal road is opened which leads from Moses up to Jesus Christ. Holiness is no longer an unattainable ideal ; the Kingdom of God, instead of being an empty sound, becomes the one true word of history. God's plan is revealed together with His Name Jehovah. The end and aim of human life, both individual and collective, can only be the dominion of the Holy Spirit over those spirits who have freely accepted His dominion. A Jew of our own time has expressed the same thought in these words : " The eternity of matter is up to this day the foundation of the pagan idea. This principle is not only a metaphysical falsehood ; it is the denial of liberty to God and man, a denial which makes an end of all morality. If any matter whatever was necessary to the Creator, He could not have formed a world absolutely good, but only the best world possible ; and man can be just as little master over his own body, as God over matter . . . . But this night of darkness and of gloom which overshadows the conception of God, of the world, and of man, is dispersed at the first word of Divine revelation : '*in the beginning God created.*' Everything, substance and form, came into being at the fiat of the creative will, which is free and omnipotent. And as the Creator governs the world freely, He can, by communicating to man a spark of His own life, grant to him the dominion over his own body and its forces. The created world is no longer only the best that was possible, but the only good . . . . Its very capacity for deterioration belongs

to its perfection, for without it there would have been no moral liberty . . . . And the same God who has assigned the world its purpose will know how to make it reach its end, by means of the same free will by which He created it." \*

We see, then, how inevitably the preparation of the salvation of the world by Israel required as its starting-point the revelation of this fundamental verity, "I am that I am," to which the natural intelligence of mankind could not of itself attain. Accordingly God, after having revealed to Moses this sublime idea, inscribed it on Mount Sinai at the head of the national law: "I, Jehovah, am thy God." † The fulfilment of the ancient promises made to Abraham by El Shaddai, the present work entrusted to the ministry of Moses, the future salvation of mankind to be effected by Christ, all rested definitively upon this doctrine, as the entire building, from the lowest to the highest storey, rests upon the foundation laid once for all.

We have affirmed the reality of the Mosaic revelation, and we have seen the necessity there was for it. It remains for us to learn in what *form* it was to be clothed in order to attain its end; which was to make intelligible and living to the Israelite consciousness this idea of the *absolute existence* of God, mysteriously set forth under the Name Jehovah. Was God to make of this dogma of the Divine self-existence and the creation of matter, an answer in a catechism which the Israelitish youth would have to learn from generation to generation?

But we know too well how feeble is the barrier which such a method of teaching can offer to the torrents of error and sin. Especially with the mass of mankind, if we wish to act upon their will, or even upon their mind, it is not to

\* *Der Pentateuch übersetzt und erklärt*, von Raphael Hirsch.

† Exod. xx. 2.

the intelligence only that we must address ourselves, but also to the imagination and the heart. We must not confine ourselves to teaching truth, we must also picture it. Or instead of a dogmatic formula, was God to have recourse to scientific demonstration,— to give to Moses, and through Moses to Israel, a lesson on the origin of the universe, to construct a complete and consecutive system of astronomy and geology, of physics and chemistry, of botany and zoology? Such a method would have had the double disadvantage of at the same time making science useless and faith impossible. What would be the use of study, when the revelation of all things had been made once for all by God Himself? And suppose Moses had descended from Mount Sinai, not only with the tables of the Ten Commandments, but with a thoroughly exact and complete knowledge of the causes, and of the laws, which governed the formation of the universe, — as, for instance, the Copernican system in detail, — who would have believed so incredible a revelation? The power of sensible phenomena, the authority of prevailing prejudices, for a moment, perhaps, overcome, would soon have regained the mastery, and this inopportune revelation would have gone down to the grave with him who announced it. Faith should be a moral act, and not merely the submission of the intellect.

There remained one method, that of which God made use when He revealed the future to the prophets. What did He do, for instance, in order to give Daniel an idea of the four phases through which the history of mankind was to pass before the coming of the Messiah? Did He give him an historical lecture upon the Assyrians, the Babylonians, the Medes and Persians, the Greeks and Romans? No, He caused to pass before him five pictures, or images, of which the remembrance remained indelible: a winged lion, symbol of the Babylonish power; a bear, with slow

and heavy tread, emblem of the Persian majesty ; a leopard with four heads, traversing the earth as on the wing, the visible representation of the Alexandrian monarchy, so rapidly founded, so speedily divided into four distinct states ; then, lastly, a monster with nothing corresponding to him in the terrestrial creation, trampling and devouring everything that comes in its way, image of the Roman empire, that state which has borne no resemblance to anything before known, and which absorbed everything into itself ; and finally, as the last of these apparitions, the form of a Son of Man coming upon the clouds, emblem of the only really human power, of the love which comes down from heaven to found here below the kingdom of liberty and of truth. This is the manner in which God teaches history, when He thinks good to make it known beforehand to His servants the prophets. He does not discuss, He does not catechise, He pictures.

This method has the double advantage of making its appeal to man in his whole being, consequently not perverting the nature of faith, and of not rendering science superfluous by anticipating its future labors. All the researches of historians, all the discoveries of the investigators of ruins and of buried palaces, instead of being made useless by such revelation, only serve to make more exact, and to enrich the pictures by means of which it was accomplished.

Why should not God, in making known past events which no eye had seen, have adopted the same method ? Why should He not have brought before the eyes of Moses a series of pictures summarizing that work, into the principles of which He wished to initiate him ? By causing to pass before him the image of those different classes of beings, deified by paganism, and which came each in succession out of nothing at the call of God, did He not give to His

people a better commentary on the Name Jehovah, in the sense which we have given to it, than He could have done by any other means? When we wish to give a nation an idea of some great victory which her sons have gained, we are not contented with a mere bulletin, which sums it up in a few lines, nor do we have recourse to a learned account of the strategic reasons for it; but we employ the most eminent artist we can find, and ask him to paint two or three of the principal scenes, which may serve as samples of thousands of others.

Such, as it appears to us, was the nature of those representations of which the record of the Creation is composed. We are told \* that during the forty days and forty nights which Moses passed upon the mount, God showed him the model of the tabernacle which he would soon have to construct. Perhaps at the same time it was granted to him to contemplate the construction of that grand edifice — the Universe, of which the tabernacle was the type.†

The pictures which God caused to pass before him, and of which he has preserved to us in the Genesis record such admirable photographs, could not contradict the researches of science. Revelation and Science are two rays which proceed from different sources, the one from heaven, the other from earth, but which in combination produce perfect light. The one pictures to us the idea in the mind of the great Worker, the other brings to our sight the concrete image of the work. Just in the same way that all historical discoveries only serve to enrich and complete the prophetic pictures of Daniel, so the discoveries of geology find in the retrospective pictures of Moses a frame ready fitted to

\* Heb. viii. 5.

† The outer court, the holy place, and the holy of holies, correspond to the earth, the heavens, and that supreme abode where God more immediately manifests His Presence.

receive them, and give them their right place. The Bible does not relieve science of the necessity of bringing to light the immense wealth of the facts, the relations of cause and effect, the means employed and the ends aimed at which make up their unity, and of discovering the laws which govern them. Science, on the other hand, does not enable us to dispense with—on the contrary, it demands as necessary,—that Word from on high which shall convey to us the real meaning of this magnificent whole.

It is most important to seize the exact point of convergence of these two rays, so that the image may be formed clear and complete for the eye of human intelligence. This ideal can never be completely realized until geology on the one hand, and exegesis on the other, shall have finished their work. But it is allowable to ascertain the amount of reconciliation already reached, and to try to make one step further on the path which leads to this end.

## II.

### SCIENCE.

WE must confine ourselves to summing up briefly the results which seem most probable, or which are most commonly received, of modern investigations relating to the formation of the globe and the appearance of organized beings. Science brings to light, as it seems to us, ten general phases of this development. We will first briefly indicate these, and then endeavor to give some explanations on these points, while holding ourselves free to question the truth of some of them.

I. These principal phases appear to have been the following:—

1. The primitive gaseous state, and the formation of the solar system.
  2. The condensation of the gaseous matter, and the constitution of the globe.
  3. The disengagement of the primeval light.
  4. The formation of the continents, and their separation from the waters.
  5. The first great development of vegetable life on the continents.
  6. The sun becoming visible to our earth.
  7. The first great breaking forth of animal life.
  8. The second great manifestation of that life.
  9. The apparition of man.
  10. The cessation of the creative work.
- We will develop briefly each of these points.

Science commonly accepts the theory of La Place, according to which our solar system — and one may even say, the universe — originated in a gaseous matter of extreme rarity and tenuity. This substance must have been analogous to that of the nebulæ which the telescope even to this day discovers in the profound depths of the firmament, and which are probably only new systems in process of formation. By means of the rotatory movement with which this matter was endowed, or which had been impressed upon it, rings were successively detached from the equatorial surface of the primitive mass. By breaking up, and then folding back upon themselves, these rings would become so many distinct systems, like our own solar system. Within these again would have been produced, on a smaller scale, the same phenomenon. So that our planets would be only rings successively disengaged from the central mass, and become so many distinct globes, arranged round the sun according to the dates at which they were severally detached. The satellites of the planets would themselves

have been detached from them by the same process. And Saturn's ring would, according to this, still remain as a silent witness to this process in the formation of the worlds.

This would explain, at the same time, the distinctness of our solar system from the universe as a whole, and its internal organization.

This gaseous matter was in an incandescent state, as is shown by all the facts which prove that our earth must have been formed under the action of a slow and gradual cooling. Whence arose this cooling? From two causes; on the one hand, the separation of the earth from the central mass — the sun; on the other, the radiation of part of its own heat into the surrounding spaces.

No condensation of matter could have taken place at so high a temperature. The size of the gaseous globe must consequently have been infinitely greater than that of the present earth.

This theory of La Place on the formation of the earth, presents, on reflection, some difficulties, and some omissions. We will now ask the attention of the reader to these two points.

1. Whence arose this rotatory movement found in matter? Was it inherent in its essence? Why, in this case, were not its effects displayed from all eternity? How does it come to pass that we are not at this day witnessing the succession of phenomena which have resulted, and which still result, from it? If the cause was eternal, it would seem that the effect produced must be eternal also. The theory of the self-movement of matter leads logically to the system of absolute immutability. The end and the middle must be as ancient as the beginning. Or, shall we say this movement was impressed from without upon matter? Then we should have to point out the agent to which so decisive an intervention is due, and to indicate the Hand which set the

universe in motion, or—to use a familiar expression—gave it a *fillip*.

2. As in each particular system, after the successive disengagements of the rings which formed the planets, there remained a central mass, which became the sun of that system, so it would seem, it must have been with the universe. We should have to find in the celestial spaces a great central sun, to which all the other suns would stand in the relation of planets. Science has not yet answered to this demand. The hypotheses hitherto proposed have not been confirmed. The simultaneous movement of the stars seems to be due less to the attraction of one central *material* point than to the influence of the reciprocal attraction of these bodies, one upon the other.

May we not suppose that, like the organic cell which explains everything but which nothing can explain, and which possesses in itself all the elements of its life, so the nebula, or aggregation of cosmical matter, emanates immediately from the creative force, with its rotatory movement and its heat, containing in its gaseous mass all the materials of its future organization? They are there—these simple elements, these gases and metals, just as the vital forces exist latent in the cell. But they are not yet there *as such*. They are the ultimate atoms. Condensation alone, resulting from the process of cooling, will make them emerge from this primitive confusion.

II. Now we are at home. Our earth, detached from the sun and distinct from the other planets, forms a globe by itself, which organizes itself henceforth according to its own laws. The cooling process, of which we have pointed out the causes, begins, and with it the work of condensation. One part of the materials of which the primitive mass is composed passes from the gaseous into the liquid state, but boiling. Then, the cooling process still continuing, a

solid crust forms itself on the surface of the liquid, which may be compared to the thin skin which appears on the surface of boiling milk when exposed to the contact of cold air. Here we have the beginning of that ground on which we live, and to which we give the name *terra-firma*.

Below this solid surface, the elements, still in a state of fusion, were stratifying themselves in the order of their density, the heaviest in the centre, the less dense in superposition above each other up to the surface.

An atmosphere of gaseous matter surrounded the globe thus constituted. But it was entirely different from our present atmosphere. For it contained, in a state of vapor, a number of elements now condensed; first, the metals which were to form the stratum nearest to the solid envelope: then bodies more easily vaporizable, such as silica, lime, sulphur; finally, those substances which are still more easily volatilized, such as the enormous mass of waters which, together with the gases that enter into their composition, form our seas.

The floor of the earth at this time had not become quite solid. Very closely submitted to the action of the internal furnace and of the gases which escaped therefrom, it must have been often agitated, lifted up, rent asunder, engulfed by that fiery sea, from the action of whose convulsions it is even now, in spite of its greater thickness, by no means altogether freed. Yet by the continual process of cooling, the solidification of matter was going on both within and without the envelope. Outside, the vapors, by condensing, formed a sea saturated with all kinds of materials, which covered this fragile floor; and on the inside, the crust gathered bulk by the condensation of those substances in a state of fusion which were the nearest to it. After each rending of the crust, it compacted itself together again with greater solidity, as the ranks of an army close up after a discharge of artillery.

What was the earth like at this period of its formation? It must have been an immense globe, of which the centre was occupied by a fiery furnace surrounded by three envelopes; the first solid,—a thin crust; the second liquid,—a sea of boiling water; the third gaseous,—an ocean of vapors. The earth would, at this time, have presented to the spectator the appearance of one of those powerful locomotives which traverse space, carrying within them a furnace, and provided with a reservoir for water, and iron walls, enveloped in an atmosphere charged with vapors.

3. All this violent working could not be carried on without evoking a great disengagement of electricity, and, consequently, of light. As a scientific man of the first rank lately wrote to us,—one whose labors have placed him at the very head of this department of science: “There could not fail to be a light produced by the powerful and numerous chemical processes which must have been at that time in operation on the surface of the earth; processes which engender electricity, and call forth luminous vibrations in the ether.”

The aurora borealis is, perhaps, in our day, the phenomenon best fitted to give us an idea of this electric light, independent of the action of the sun.

The admirable experiments by which M. de la Rive has succeeded in producing, on a small scale, in his laboratory, all the phenomena of the aurora borealis are well known. It seems to be demonstrated by these experiments, that these magnificent appearances are only the result of the neutralization, in the polar regions, of the two opposing currents of electricity. The principal source of all this mass of electricity is the contact which takes place, at the bottom of the ocean, between the water of the sea and the internal fire of the globe, and which occurs especially near the equator. Two currents are formed and directed

towards the poles, one travelling underground, the other by the vapors which rise from the sea, and by way of the atmosphere. The aurora borealis is the method of their neutralization.

If, in the present state of the world, things of this kind take place, let us imagine the time when the sea was only separated from the subterranean fire by a thin and fragile partition, and when, consequently, the communications between the two elements must have been much more frequent and more abundant than they are now. It is easy to form an idea of the incomparably greater and more powerful disengagement of electricity which must have taken place under those conditions, and consequently of the splendor and frequency of those luminous appearances, which more or less periodically dispersed the darkness which reigned on the earth; all the more so since, as the author I have just quoted adds, "because of the elevation and uniformity of the temperature," these luminous appearances "would not have been confined to the neighborhood of the poles, but would have formed a kind of atmospheric aureole round the whole globe."

As the process of cooling continued, the volatilized substances which enveloped the globe were successively condensed; the densest first, and these must certainly have been the metallic vapors. Other lighter materials, such as aqueous vapors, which occupied the higher regions of space, were then condensed by contact with the colder regions, and formed a canopy of clouds, floating at a certain height above the globe. In the intervening space between this aerial ocean driven by the winds, and the liquid plain which formed nearly the whole of the terrestrial surface, and which was kept in a boiling state by the emanations from the internal furnace, was spread the atmosphere, such as we now have it, a stratum of respirable air, which

had become more and more free from all the materials with which it had been until then saturated.

4. The floating masses, more or less solid, which had formed themselves on the surface of the fused coagulated sea of fire, had combined themselves into one continuous pavement. This first layer of the earth's crust had, by the increasing condensation of vapor, become entirely covered with water. The globe presented the appearance of an immense sea. Only a few solitary peaks and domes of granite raised their heads here and there above the surface of this boundless ocean. These were the first rudiments of our continents. But the rocks which emerged were soon no longer completely bare; their first clothing was a stratum of sedimentary deposits. Whence arose these deposits? From the *débris* of the first-formed rocks, which had been rapidly dissolved or worn away by the hot waters of this primitive sea. These, the most ancient stratified rocks, are still to be seen in several places in Europe and America, wherever, not having been covered at a later age by the sea, they have not become the ground on which more recent strata have been deposited. They may be known by the absence of all remains of vegetable or animal life preserved within them. These are the monuments of the time when no organized being existed upon our globe. And, indeed, how could the evolution of life under any form have borne the degree of heat which then prevailed, or the physical and chemical conditions of such a state of things?

But we are soon brought face to face with a new and most important phenomenon. The fossils enclosed in the latter stratified rocks reveal to us the first appearance of organic life on our globe. These were principally vegetables,—algæ, and some other species of marine plants; then also some species belonging to the animal kingdom,—crustaceans and molluscs, some kinds of echini, corals,

or bivalves, humble pioneers of life upon this stage of the world. This fact puts to science the most formidable question which she can ever have to answer, that of the origin of organized life.

All life, vegetable or animal, has for its starting-point the organic cell; that is a fact which no man of science now disputes. But whence comes the cell itself? Is it the result of some happy combination of the elements of inorganic matter? or is it a sudden apparition in the midst of this,—a phenomenon entirely inexplicable without the act of a creator?

The beautiful experiments of MM. Pasteur, Pouchet and Bastian are well known. The result of their labors has been recently formulated by the President of the Naturalist Society in England, Sir William Thomson, in his opening address to the assembly at Edinburgh (1871). These are his words:—

“A very ancient way of thinking, to which many naturalists still hold fast, admits that by means of certain meteorological conditions, different from the present, inanimate matter may have crystallized or fermented in such a manner as to produce living germs, or organic cells, or protoplasms. But science affords us a number of inductive proofs against this hypothesis of *spontaneous generation*, as you have already heard from my predecessor in this chair (Mr. Huxley). A minute examination has not, up to this time, discovered any power capable of originating life but life itself. Inanimate matter cannot become living except under the influence of matter already living. This is a fact in science which seems to me as well ascertained as the law of gravitation . . . . And I am ready to accept as an article of faith in science, valid for all time and in all space, **THAT LIFE IS PRODUCED BY LIFE, AND ONLY BY LIFE.**”

If, as a consequence of this candid and weighty declaration, the author supposes that the first germs of organic life may have reached our globe by means of aerolites which should have imported them from higher spheres, few readers would not smile at such a solution of the difficulty. Who would not say that such a solution, even supposing that the observed facts were in its favor (which they are not), is not really a solution at all; that the main difficulty is only removed a step further back, since we should still have to explain the first appearance of life in these globes from which the aerolites are supposed to have come?

Might we not rather admit that, since the Creator has caused primitive matter to come into existence, not as one uniform substance, but composed of a certain number of irreducible elements, or "*simple bodies*," which, entering into the composition of the nebulæ, at once develop their various properties, he may also have endowed it from the beginning with a certain number of organic cells, containing within themselves the latent principles of the fundamental forms of life, and destined to develop themselves in many various directions, as circumstances favored this evolution.

5. Earthquakes and contortions of the earth's crust became more frequent. On the one hand, the interior mass, diminishing in bulk as it condensed, the solid envelope, being no longer sufficiently supported from below, either *crumpled* itself or gave way and sank. On the other hand, the subterranean fire continued to act upon it, and to split it into fissures. The mass of condensed vapors became continually greater; the quantity of water was always on the increase. Substances held in suspension were deposited in abundance on the sea-bottom; then they were brought up again, borne upon their granite pavement. It is in the midst of these new settlements that we come upon traces of the first *great*

*evolution* of organic life, — the relics of the carboniferous flora. Every one knows that our industry is mainly sustained by the enormous deposits of coal contained in certain strata of the earth's crust. It was at the period of which we are now speaking that these masses were deposited. It was then that that flora of luxuriant abundance developed itself, of which we are even now reaping the fruits. It impresses us not so much by the varieties of species or the richness of its coloring, as by the grandeur of its proportions. The coal-beds do not contain more than 800 species of plants, instead of the 80,000 to 100,000 of which our present flora is composed. But of what enormous size ! Grasses, of kinds which are now but small marsh plants, attained to the thickness of a man's body, and to a height of 60 or 70 feet : mosses and ferns in the same proportion relatively to the corresponding plants in the present state of things ; but there was not one flower of brilliant color, not one fruit-bearing tree. This carboniferous flora had no adornment but its verdure. What conclusion can we draw from this, but that the sun's light at that time only reached our globe through a thick veil, and that this vegetation owed its power less to this solar heat than to that which came forth from the earth itself ? Accordingly, the carboniferous flora was spread uniformly over the whole globe. There was at that time neither torrid nor frigid zone. The difference of climates, which is caused by the different degrees of inclination of the sun's rays to the earth's surface, did not as yet exist.

But how, it will be asked, could such a vegetation thrive without the action of the sun's rays ? Recent experiments have completely solved this difficulty. It has now been proved that electric light possesses all the qualities needed for the development of the green parts of plants. M. Faminzin, in all his experiments upon algæ, has never made use

of any light but that of a gas lamp.\* The author whom we have already twice quoted, also declares that electric light possesses, equally with the light of the sun, "all properties essential to vegetation."

The flora of the carboniferous strata must have displayed itself through long ages on the surface of the globe. It has been calculated that some coal-beds must have required from 700 to 800 years to form themselves, and as they often stratify themselves one over the other to a very great height, there are some carboniferous rocks, the formation of which, taken all together, must have required no less than nine millions of years. We may picture to ourselves this long period as a series of hot, damp days, like those in which agriculturists delight in the spring, at the time of the development of the young shoots. Imagine a greenhouse heated to a high degree, its glass walls blackened in such a manner as to intercept the sun's rays, and of which the principal light should be that of an electric flame; what would be the products of the vegetation under such conditions? Colossal plants, but without brilliant coloring; gigantic forms of greenish hue. Such was the carboniferous vegetation.

6. At this period there was, as it were, a pause in the development of organic life. The strata immediately above the carboniferous deposits prove that the world was, to a singular degree, stripped of animal and vegetable life. "Compared to the wealth of the carboniferous period," says the botanist Karl Müller,† "this new creation is infinitely poor." The great evolution of vegetable life is on the decline, and animal life has not yet taken its mighty spring.

The ages following witnessed a slow but total transformation in the kingdom of plants. "Then," says the same

\* *Kerasin-lampe*, — *Der Naturforscher*, 1871, No. 4.

† *Les merveilles du monde végétal* (translation), vol. i., p. 133.

author, "began the transition between the carboniferous vegetation and the new plant world." This new evolution of vegetable life extends throughout the triassic, jurassic, and cretaceous eras, up to the tertiary period (molassic,) when it reaches its completeness. It was brought about under the influence of different agents. But the principal one which we have to mention here was the direct influence of the sun's rays, which seem from this time to have acted powerfully upon the earth. In speaking of the tertiary flora and of the *immense progress* seen in it, M. Müller says; "I believe we must attribute this result to the solar light which by the help of the transformation of an insular climate — misty, cloudy and dark — into a continental climate, was enabled to penetrate more freely and to act with greater intensity. Beneath a tropical sun, vegetable life takes new developments with much greater power than under a northern and veiled sun. . . . It was, then, in the tertiary period alone that the more graceful flowers made their appearance, faithful reflections of the new era, of its azure sky, and its radiant sun." \*

As this transformation of vegetation was gradual, and, according to M. Müller himself, began in the ages which followed the carboniferous period, we have in this fact a most important revelation of the part which the sun began to play, at the end of the carboniferous era, in the development of life on our planet. The thick covering of clouds which had veiled the lamp of day during the preceding ages had been torn asunder; its rays had now free access to the earth; henceforward it shone regularly upon our globe. And it is this great painter of Nature who, from this time using his brushes freely here below, is to begin to clothe the plants, the children of the light, with those brilliant colors which had hitherto been wanting to them.

\* Müller, pp. 163, 164.

7. The carboniferous vegetation had done a great service to the earth. It had absorbed an enormous quantity of carbonic acid, which it had converted into fuel, while, at the same time, purifying the atmosphere from that ingredient so injurious to animal life. It had thus prepared the way for the first great outbreak of this latter form of life. The masses of rock which formed the mighty layers of the jurassic and cretaceous strata are the sepulchres of an innumerable animal population. They are not only the work of myriads of these living creatures, but these colossal stratifications, lifted later on in time into the light, are entirely composed of their remains. Ehrenberg has counted up as many as ten million minute shells in one single pound of chalk; and, as Mr. Alfred Maury says, the soldier, when he cleans his helmet with a cubic inch of tripoli, has in his hands no less than forty-one millions of animalcules; at every rub he pulverizes from ten to twelve millions of fossil animals.

But in these masses of rock lie buried also the remains of other animal populations, both marine and amphibious.

By the side of the corals and the infusoria, those innumerable prolific creatures who filled the ocean and labored unceasingly to form this ground upon which we are now ourselves working, there lived already, in the jurassic and cretaceous eras, some species of a higher order, the "*petite bourgeoisie*" of the time, more particularly represented by those wonderful molluscs which bear the name of ammonites, belemnites, etc. Higher still in the scale of animals, there crawled by the banks of the oceans and rivers, multitudes of tortoises and lizards, the "higher gentry" of the time. At last came the "aristocracy" of this middle age of Nature, who preyed upon these "lower orders," and made war amongst them. These were gigantic reptiles, armed with terrible weapons for attack. Such was the

*plesiosaurus*, a lizard forty feet long, with a head like a serpent, and a jaw six feet long, a swan's neck from fifteen to twenty feet long, a body provided with four paws in the shape of paddles, like those of the wheels in our steam-vessels, which it used as oars, and with a thick tail, shorter than that of a crocodile, for a rudder. Then the *ichthyosaurus*, thirty feet long, with a slender snout like a dolphin, its jaws armed with one hundred and eighty teeth, preying, as is proved by the remains found inside its body, not only upon tortoises and molluscs, but upon creatures of its own kind. Then a still stranger creature, the *pterodactyl*, a real flying dragon, like those of the dreams of our superstitious forefathers, which to an elongated beak-like snout, crocodile teeth, and tiger-like claws, added wings like those of a bat. There were some of all sizes, from that of a canary bird to an eagle. One has been found in England, whose extended wings measured no less than twenty feet across, while those of the great Alpine eagle do not exceed eleven feet. Later on we come to the *megalosaurus*, whose gigantic body, fifty feet long, lifted itself to a greater height above the sea than the elephant does above the ground. "Its teeth," says Figuier, "combine the characteristics of a sword, a knife, and a saw." Notice again the *iguanodon*, the most colossal of the saurians, remarkable for its nasal horn; this was an herbivorous animal.

It is also to the beginning of this saurian era that we trace the first appearance of birds. It is believed that in the same strata, footprints of gigantic wading birds, and fossils of great birds of the ostrich kind are to be found. But up to this time, with the exception of a tiny insectivorous rodent, and later on (in the chalk) a kind of opossum, no mammal nor any terrestrial animal, properly so called, makes its appearance.

8. The race of amphibious monsters dies out by degrees

at the close of the jurassic and cretaceous formations. Deposits of an entirely new sort soon covered all that part of those strata which lay at the bottom of the sea. These are the molassic beds which form so large a part of our present soil, and in which are preserved the remains of a whole new creation of animal life. Terrestrial animals, quadrupeds small and great, and domestic animals, at last make their appearance. This is the era when the *dinotherium*, a species of seal or elephant, armed with two hooked tusks under the lower jaw, grubs in the earth to dig up the roots and bulbs on which he feeds; when the aquatic salamander, six feet long (whose remains were for a long time mistaken for a human skeleton), peoples the bays of the continents; when the massive *megatherium*, and the *mylodon*, slightly smaller—both species of the ai or sloth—with snout-like muzzles and enormous claws, grub in the earth, or crawl upon the trees; when finally, as the king of that age, the gigantic elephant of America, the *mastodon*, with a body longer than that of the present elephant, and thicker limbs, feeding upon roots and other vegetables, prowls by the side of the rivers in the marshy lands. At this time also the first species of monkeys came into being.

A little later, at the period of transition between the tertiary and the modern age, animal life, although still different from that of our own time, continues to assume more and more of its characteristics. This is the age of the *mammoth*, another elephant, with long spiral tusks bent backwards, pendent ears tufted with hair, and a long black mane. The specimen of this creature found at the mouth of one of the rivers of Siberia in a mass of ice, in which it had been imprisoned, exhibited its flesh and hair in perfect preservation, and the contents of its stomach bore evidence to its favorite food, the leaves of the Siberian *mélèze*. The

primeval massive-headed ox then inhabited the prairies. The hippopotamus and two-horned rhinoceros, the great elk, with his magnificently spreading antlers of which the two extremities were some ten feet apart, the cave-bear, troops of lions, tigers, hyenas, tapirs, peopled the forests and the plains.

9. Man did not yet exist ; but all these forms, becoming more and more like those known to us, announce that his arrival upon the scene is not far off. In fact, the era of those great mammals, of whom we have just given an idea, leads us up to that solemn moment when this visible king of Nature made his appearance upon his domain. The first traces of his presence which have been discovered place his arrival at the end of the period when the gigantic quadrupeds buried themselves in those beds of mud or of ice in which they have been preserved for us.

With man appear the first traces of intelligent activity — of industry. Tools of different kinds, made evidently for a *purpose*, announce the presence of Intelligence and of Liberty on this earthly stage. A new world opens itself, as that of Nature closes. The being whose creation was the goal and aim of all the work that had preceded — whose bodily organization had been the standard and rule for all those anterior to him, the model to which they had gradually approached \* — has now appeared ; History — the development of a free being — begins.

10. One fact, remarkable above the rest in the history of Nature, clearly signalized this appearance of man as the *intended end* of all the development of which we have just sketched a picture ; that is, the cessation of all production of new species in the field of vegetable or animal life, from the moment of the creation of man. The efforts of Nature

\* K. Müller : " The creation of the first vegetable cell is the first step towards the future creation of man."

seem to cease, and her productiveness to be exhausted. Thenceforward there is no further development of vegetable life except by cultivation and grafting; nor of animal life but by training and education. Nature seems to have yielded her sceptre to man, who not only sees no new creature arrive upon the scene superior to himself or who could be his rival, but who gradually extends his power over all those whom Nature had produced before him. The world may be compared to a country-house which a mother's loving hand had built, ornamented and furnished, in prospect of the expected arrival of her beloved son. Man, the being thus expected, has no sooner appeared than all creatures throughout Nature hasten to pay him their tribute, and render homage to him as their lord.

### III.

#### THE TWO COMPARED.

HAVING now set forth the general results of the study of geology with regard to the general question before us, let us look at the picture drawn by Moses, and note the points upon which it seems to diverge from, and those upon which there is no difficulty in harmonizing it with, these scientific deductions.

Every one knows the story of the Creation in the first chapter of Genesis. Nevertheless, it may be well to summarize it here, in order to indicate its gradual progress, and to observe carefully its tendency.

Moses begins by a word of a general character, and which comprehends in itself all that follows: "In the beginning God created the heavens and the earth." This verse, however is not a mere heading of a chapter; it indicates also an

actual fact. The proper meaning of the word "to create" (*barah*) is to cause that which existed only in the inner to pass into the outer world, — to give objective existence to that which had before been only present to the mind.\* This word *created* marks, then, in all cases the fundamental act, the preliminary condition of all that follows; the production of primeval and universal matter, out of which have been formed, by means of successive steps of organization, both the heavens and the earth.

Immediately after this general statement, the narrative takes leave of the subject of the heavens; the creation of which must certainly, in the mind of the author, have taken place simultaneously with the work to be accomplished on the earth. If he speaks again, later on, of the heavens, it is not till the fourth day, when their organization has been completed, and they have entered into their normal relations with the earth and the living creatures upon it. It is from this point of view only that such a narrative could be concerned with them; for it does not include any system of cosmogony; it is always man whom it keeps in view.

Here, then, we have, in the first place, a denial of the independent existence of Matter, which all the systems of antiquity made to co-exist eternally with the Deity, and which, as an obstacle not to be overcome, hindered all the efforts both of God and man for realizing the perfect good.

After the second verse, it is of the earth, and of the earth only, that the narrative speaks. The earth did exist, but in the form of chaos (*tohou vabahou*). This expression does not mean a state of disorder and confusion, but that state of primitive matter in which no creature had as yet a distinctive existence, and no one element stood out in contradistinction with others, but all the forces and properties of matter existed, as it were, undivided.

\* See Raphael Hirsch, *Der Pentateuch*, vol. i., p. 4.

The materials were, indeed, all there, but not as *such*, — they were only latent. However, the Creative spirit, the principle of order and life, brooded over this matter, which, like a rich organic cell, comprehended in itself the conditions, and, up to a certain point, the elementary principles of all future forms of existence. This Spirit was the efficient cause, not of matter itself, but of its organization, which was then to begin. He was the executant of each of those Divine commands which from this time were to succeed each other, stroke after stroke, till this chaos should be transformed into a world of wonders. By the “*waters*” upon which this Divine virtue is said to have moved, must be meant either cosmical matter in its primitive and gaseous state (the Hebrew has no special word by which to express a gas), or else the sea, properly so called, which already, like a vast sheet, enveloped the whole globe.

The work of the first three days consists only in preparing the stage upon which Life was to appear and to exhibit itself. That of the last three will be the appearance and development of life itself — that is, of life properly so called, animal and human life. On the first day, darkness gives way to light; on the second, the waters to respirable air; on the third, the universal sea to dry land. These are the three necessary preliminary conditions for the appearance of vegetation, which crowns the work of the third day, and opens the way for animal life.

The first “*God said*” produces Light. The mention of this Divine command is sufficient to make the reader understand that this element, which was an object of worship to so many oriental nations, is neither an eternal principle nor the product of blind force, but the work of a free and intelligent will. It is this same thought which is expressed in the division of the work of creation into six days and six nights. The Creation is thus represented under the image

of a week of work, during which an active and intelligent workman pursues his task, through a series of phases, graduated with skill and calculated with certainty, in view of an end definitely conceived from the first.

When it is stated expressly (verses 4, 5), that God divided the light, which He called *day*, from the darkness, which He called *night*, the author intends us to understand by that, that God, immediately after creating the light, established a periodicity in its appearance and disappearance. The *day* is not the light ; it is a space of time illuminated, and intended for active work. The *night* differs in the same way from darkness ; it is an interval of time darkened, and intended for repose, that is to say, for a new concentration of the forces of life. From the first appearance of light, God ordained this alternation, of which the consequences are seen to be so infinitely beneficial to all creatures, as long as they are in the condition of gradual development.

The belief has been imputed to Moses (because of the word *firmament*, which is used in some translations in verses 6, 8), that the heavens formed a solid vault above the earth. But the Hebrew word *rakijah* (from *rakah*, “to extend”) indicates, on the contrary, an element capable of expansion ; the word *extension*, therefore, is a much more accurate rendering of the Hebrew term. We may apply the word *extension* in our narrative to the Infinity of Space, and understand by “the waters above,” the gaseous matter out of which the stars were formed, and by “the waters below,” that out of which the terrestrial globe is formed. But it is more natural to give here to the word *heavens* the more restricted meaning of the terrestrial atmosphere, and to apply the expression, “*the waters above*,” to that mass of vapor which floats in the air in the form of clouds ; and the expression, “*the waters below*,” to those masses of liquid

which cover a large portion of the globe. This meaning appears to be that most naturally indicated by the opposition between the waters and the land in the following verses.

The apparition of the land, and its separation from the water, is the work of the third day (verses 9, 10). No sooner are these three conditions — light, air, and sunshine — given, than the first form of organized existence makes its appearance (verses 11, 12); the land is covered with a carpet of grass, and richly adorned with shrubs and seed-bearing trees. On the one hand, it is to the command of God that this new form of existence is due, — “*And God said;*” and on the other, it is from the earth itself that it proceeds, — “*Let the earth bring forth.*”

The production of plants forms the transition from the work of the first three days to that of those which follow.

At the head of the work of the last three days is placed (verses 14–18) the appearance of the sun, moon, and stars. The mention of this fact explains to us why, in the first words of the narrative, the author had spoken of the creation of the heavens as well as of that of the earth. Is this the moment when, to his mind, the organization of the stars, or at least that of our solar system, was completed? Or does he only mean that this was the time when these stars first exerted their illuminating and life-giving power upon our earth, when they began to enter into relations with her as *centres of light*? This second sense appears to be more consistent with the general tendency of the narrative, and particularly with these words: “*Let there be lights in the firmament of heaven.*” Everything is connected with the development of animal life, and chiefly with the appearance and future activity of man: “*lights which shall be for signs and for seasons, and for days and years.*” If light in general is the condition of the work of the first three days,

the relation of the earth to the stars, and particularly to the sun and moon, is the condition, not less indispensable, of the work of the last three days.

The description of the fifth day (verses 20-22) brings before us the first appearance of animal life. This takes place under two principal forms,—that of the marine animals which the waters bring forth at the command of God, and that of birds. By the first must be intended, principally, fish and amphibious creatures: “*God created great whales, and every living creature that moveth,*” (*roméseth from ramas*, literally, “*to advance by crawling*”).

Thus the two first elements, air and water, are opened to life. The third, the earth, is put in possession of this gift on the sixth day (verses 24, 25), by the production of domestic animals (*behémah*, “cattle”), reptiles (*rêmes*, “that which creeps upon the earth”), and the beasts of the field (*chajath haérets*, “the wild beasts of the earth”).

Finally, on the same day, in the second part of this day, God created man, Adam, His representative here below.\* His body is no doubt taken out of the ground, like those of the animals; but God forms it with His own hand, and inspires it with a life which emanates from His own breath, Here is the master-work of that Spirit who, in the beginning, moved upon the face of the waters. He worked upon and elaborated matter, only to make it serve, under the form of a human body, as an *organ* for a spirit which proceeds from Himself; for in man the Spirit reproduces Himself in the form of a creature.

This last-mentioned being is the aim and end in particular of the work of the last three days, and, at the same time,

\* Hirsch, in the work before quoted, instead of seeing in the word *Adam* a derivative from *Adamah*, “the earth,” inverts the relation of the two words, and that for very good philological and logical reasons. He derives it from the word *adam*, “red-colored.”

that of the whole work taken together. Under the former head, the appearance of man in the second part of the sixth day, corresponds to the creation of plants in the second part of the third day. As plants are the ornaments of the newly-formed dry land, so man is the crown of that animal life which had gradually developed itself.

After that, the work is complete, and the rest of the seventh day puts an end, not to the Divine activity in general, but to the creative activity, properly so called. The Sabbath, the great "*thus far, and no further*," which puts an end to the Divine work in Nature, gives a solemn confirmation to the truth already set forth in the repeated words, "*and God said*,"—the truth, namely, that the earth is not the result of blind and ungoverned powers—no Sabbath was to put an end to the ferment and activity of forces like these—but it is the work of an intelligent and self-governing Being, who does all things by measure, who sets before Himself, while working, a definite object to be attained, and who, as soon as that object is attained, sets at rest again those productive forces which He had put in motion.

Such is the record of Genesis in its majestic simplicity. If this record is true, which admits of no doubt in the mind of any Israelite, it follows that neither *Ormuzd* (light), nor *Vulcan* (fire), nor *Zeus* (the air), nor *Cybele* (the earth), nor *Apollo* (the sun), nor *Diana* (the moon), nor the ox *Apis*, nor any animal, reptile, bird, or quadruped, nor any man (pretended representative of *Ormuzd*, or *Brahma*, or *Osiris*), has any right to Divine honors. The supreme attribute, self-existence, Deity, belongs to Jehovah alone.

What relation, then, does the Mosaic picture, thus understood, bear to the results hitherto reached by science?

To begin by the points of difference; there are two which strike us at the first glance.

1. Genesis speaks of days ; but the periods implied by the stratifications and the fossils they contain must each have consisted of millions of centuries.

2. According to Genesis, animal life did not begin upon the earth till after the appearance of the plants, whereas the oldest strata that contain vegetable remains exhibit already some *débris* of crustaceans and of corals — monuments of an animal life which must have existed contemporaneously with that primitive vegetation. At the same time that the rich carboniferous flora developed itself, there existed also different species of fish, and one breathing vertebrate (the *labyrinthodon*).

These are differences of which we are not to deny the importance ; and if we are to consider the record of Genesis as the result of Divine *dictation*, we must own that we should be not a little embarrassed to account for these two points, on which there seems to be a clear disagreement between the Bible narrative and the facts of science.

On the other hand, the points of resemblance are still more striking, — all the more so, because on many of these points, what is told us in the Bible being, as if designedly, in contradiction to that which we see, there would seem to be no other reasonable mode of explaining their origin.

The resemblances are these : —

1. According to verse 2, the earth, from the moment when it may be said to have had an existence of its own, was surrounded by water. Now, science affirms that the strata of which the crust of the earth is composed, were deposited in water, and that consequently, in the first ages of its organization, the globe must have presented the appearance of a surface entirely liquid.

2. In verse 3, Genesis assigns the creation of light to the first day, while the appearance of the sun did not take place till the fourth. It thereby defies the visible appear-

ances which seem to make of Light an emanation from the sun. But Genesis goes still further ; it assigns to the same date the commencement of the regular succession of days and nights, a succession which, nevertheless, according to the observation of all men, depends upon the daily appearance and disappearance of the sun. Accordingly, all superficial minds, from Voltaire, the genius of sarcasm, to the pygmies of the *Progrès* of Délemont, can never sufficiently ridicule the follies of the Mosaic record. If they were more dispassionate, they would perhaps say that however ignorant Moses may have been of their heights of science, he had two eyes as well as they ; and they would ask how came he to compose a story so contrary to the most obvious probabilities. The fact is, that the results of modern science, still ignored by the *savants* of Délemont, render a striking testimony to the truth of the Mosaic record, and to the astonishing wisdom which characterizes it.

It is now, in fact, an established truth, that Light is in its nature entirely independent of the sun. It is a vibration of the ether, in which the sun is, in our time, no doubt, the chief agent, but which may be produced by the action of many causes. Just as a tightly-stretched wire or string does not vibrate only under the action of the bow specially adapted for that purpose, but may be made to do also without a bow, and before any bow had been invented — by the action of a simple current of air, for instance — so the ether which now vibrates regularly under the periodic action of the sun, may have formed and propagated its waves of light without the sun and before the sun. The sound of the Eolian harp bears the same relation to that of the string touched by the bow that primitive light does to the sun. How could Moses have known what Science has only recently discovered, and have perceived that the sun, instead of being the source of light, is only the present and tempo-

rary instrument for its diffusion? But the other fact we have mentioned ought perhaps to astonish us still more. How can Genesis speak of an alternation of days and nights as a phenomenon anterior to the appearance of the sun? There is nothing to object to, as we have seen, in this precedence in itself. Modern science explains the fact. If ante-solar, primitive light was, like our present aurora borealis, the effect of the neutralization, throughout the whole atmosphere, of the two opposing kinds of electricity, this light must have had its hours of dawn, of mid-day splendor, of decline, and of complete cessation. Consequently, according to the expression in the Bible narrative, there may have been, and must have been, *days* and *nights*, *evenings* and *mornings*, before ever the sun rose and set on our horizon. But at the time when Moses wrote, how was it possible for him to affirm anything of the sort? That is a question for an answer to which we may wait, and shall wait a long time. Yet the fact of the Bible narrative is here before our eyes in all its undeniable and paradoxical clearness.

Genesis tells us (verse 9) that the *dry land appeared* in the midst of the waters, and that thus the separation was made between the land and the sea. If there is one fact more certainly proved by modern science than another, it is that the continents were gradually lifted up from the bottom of the sea.

4. Genesis speaks of a great vegetable creation, which covered the lands then just emerged. Science has ascertained, by the discovery of the carboniferous strata, that a period of colossal vegetation followed the upheaval of those primitive rocks of which the terrestrial envelope is composed. Of this the coal-beds which we work are the monuments. And if the gentlemen of the *Progrès* amuse themselves at the expense of Moses, for being such a simpleton as to place the growth of plants before the creation of the sun,

science proves that Moses, who lived fifteen centuries before Christ, knew more about the subject than they do, living in the nineteenth century of our era. For it proves that there is a light, other than that of the sun, which possesses all the properties required by vegetation, and that this light existed at the beginning of the world.

5. Genesis makes the appearance of the sun, moon, and stars on our horizon to take place after this great evolution of vegetation. Now what has Science demonstrated? It acknowledges, in the person of M. Karl Müller, who cannot be suspected of partiality in favor of the Scriptures, that during the periods which followed that of the carboniferous vegetation there was effected, by degrees, a transformation more and more complete in the vegetation; which could only have been produced under the immediate action of the solar rays, hindered during the carboniferous era. A very strange hypothesis has been lately put forward, namely, that the moon may be simply that fraction of the earth's crust which originally filled up the immense basin of the Pacific ocean. If it should ever be proved that there is any truth in this bold conjecture, we might allow, not only that the solar system became visible to the earth at the time of which we are now speaking, but that it then only really reached its present organization, and had its relations with our globe definitely settled.

6. To the rich development of vegetable life on the third day, Genesis makes to succeed a no less mighty bursting forth of animal life, in the waters and in the air, on the fifth day. Now Science has proved, by the remains of organized beings found in the strata of the triassic, jurassic, and cretaceous periods, which followed at some distance upon that of the carboniferous strata, that a development of animal life, of marvellous richness, had taken place in the oceans at that epoch. And, more astonishing still, it is also

to this age that geology assigns the date of the appearance of birds. How was Moses able thus to affirm the priority of marine and amphibious to terrestrial animals? And how can he have known the contemporaneousness of the appearance of birds and of the inhabitants of the sea?

7. Next after the appearance of life in the waters and in the air, Genesis places the creation of terrestrial animals, of cattle, wild beasts, and reptiles. Now Science has proved that it was at the time of the molassic or tertiary formations, which were deposited immediately after the jurassic and cretaceous strata, that precisely these three classes of animals did make their appearance. According to the very exact data of M. Heer, \* the Swiss *molasse* has comprehended three sorts of serpents, eighteen kinds of beasts of prey and of rodents, and forty-eight species of pachyderms (herbivorous animals), and ruminants. This, then, was indeed the first great introduction into the world of terrestrial animals and mammals. It seems as if a whole multitude of his future subjects whether independent or prepared beforehand to submit to him, hastened to appear upon the globe to meet the sovereign who was approaching.

8. The appearance of all these forms, so infinitely various, of organic life, animal and vegetable, is attributed in Genesis to a series of Divine commands: "*and God said,*"—without, however, thereby either denying or even omitting expressly to notice the instrumentality of natural agents, as witness the expression: "*let the waters bring forth, . . . let the land bring forth.*" What says Science upon this point? We make no attempt here to treat the question of the *permanence of species*. Certainly, Moses seems to affirm this great principle, which Darwin is far from having succeeded in overturning. But from a still more general point of view, what is it that Science has in

\* *Die Urwelt der Schweiz.*

our day to do? Is it not to establish the harmony of those two equally received principles,—one, that *Life can only be produced by Life* (p. 92), the other, that this engendering of life by life is governed by second causes, and requires the co-operation of the natural elements? Moses has not, it is true, given us the exact formula for this harmonization. To work at discovering it is one of the highest tasks of Science. But has he not erected, with a bold and firm hand, the two pillars of the arch which is to form that bridge so difficult of construction? “*And God said,*”—there we see the principle that life alone is capable of begetting life. “Let the *earth*, . . . let the *waters* bring forth,”—there we see the co-operation of Nature freely granted. The defenders of the creative principle must not allow themselves to be drawn into denying the truth contained in these last words; on the other hand, no possible discovery in the direction of Darwinism can go beyond it.

9. According to Genesis, the creation of man was the close of the work of creation; and this supreme act was accomplished on the same day as that of the creation of the terrestrial animals. Now modern science shows that the first vestiges of the existence of man do not make their appearance till the most recent stratifications, at the end of the tertiary period; but nevertheless they do appear in the course of that period. The sixth day did then really witness, as the Scripture tells us, the contemporaneous existence of man and of the representatives of that great animal creation which immediately preceded his arrival. There was not here the closing of one epoch and the beginning of another; it was the continuation of the same period.

10. And now let us bring out, with regard to man, one special point. Genesis affirms the creation of a single pair, from whom all mankind descended. It is not long since

Science protested with all its strength against this dogma of the unity of the human race. It urged the anatomical and physiological differences of races ; and affirmed in its most trenchant tones the absolute impossibility of deriving them from a single pair. And now we have this same Science not shrinking from the far more hazardous attempt of deriving from one and the same organic cell . . . is it all mankind ? No, that is not enough. Or is it all mankind and all animals together ? That is still too little. It is all organized beings, even plants,—all from one single source of organized life !

O Science !

The object at that time was to play tricks with Scripture upon one particular point—the unity of the human race. It is now to clear away the Divine element out of our theory of Nature. They are as ready now to swallow a camel as they were then to strain at a gnat ! And Science lends herself easily to all these contradictory services demanded of her. Docile servant, preached up in public as the queen of the world, and made in private the slave of all our caprices !

However it may be, we are now assuredly allowed by Mr. Darwin and his disciples, to maintain that the unity of the human race, proclaimed by Genesis, is no longer open to any insuperable scientific objection. The theory of the transmutation of species has indeed many another mountain to get over !

11. Genesis speaks of a Divine sabbath, a full stop placed by God Himself to His creative work ; a day assigned to God's well-beloved child, just created, for rejoicing in God and becoming one with Him. And Science proves that, as a fact, with the appearance of man, the creation of all new species ceased, and that in the midst of this repose of Nature, bought at the price of such

prolonged labors, that purely moral work at once began of man seeking his Creator, and transferring to God, by worship, this world which God had set up for him by the creative act. All this present age is the sabbath, in which, the work being now completed, the master-work and the worker meet and greet one another in love.

What are we to think of such a series of points of agreement? Are they the result of accident? As well might we say that the fitting together of two cog-wheels is a mere chance. Are they the result of observation of Nature, or of philosophical speculation well directed? But what philosophical labor could have led us to the idea of light appearing and disappearing periodically, independently of the sun? And even if it had been possible to argue conclusively from simple observation that the appearance of the vegetable kingdom must have preceded that of animals, what experience could have led to the idea that the marine animals and birds appeared simultaneously, and that they preceded the terrestrial animals and reptiles; and that finally, the appearance of these last had bordered immediately upon that of man?

It has been thought by some that there is a logical symmetry in the account of the work of the six days, sufficient to account for it. On the first day, light; on the fourth, the luminaries: on the second, the waters and the atmosphere; on the fifth, marine animals and birds: on the third, the land and plants; on the sixth, land animals and man. But whatever may be thought of this parallelism which, in order to make it more complete, would require that birds only should have appeared on the fifth day (corresponding with the creation of the atmosphere on the second day), and that the marine animals should not have come in till the sixth day, together with the land animals (corresponding with the separation of the land and waters

on the third day), the coincidence of these arrangements with the actual order of creation demands, none the less, as we have seen, some explanation other than that which any of the rationalistic hypotheses are able to give. This desired explanation we believe we have sketched out at the beginning of this essay. We must acknowledge in the Mosaic record a revelation, but not in the form of a dictation. It is, as we expected beforehand, knowledge given under the form of pictures, analogous to those of the prophetic visions. And from this point of view, the two difficulties which we mentioned at the beginning are easily explained. Moses speaks of days, and it was really periods of millions of years which were required. We will not urge here the very indefinite sense often given to the word *day* in Scripture, but we will say : If it was the purpose of God to cause Moses to contemplate in an abridged form the principal phases through which the work of creation passed in its gradual development, would not the best way of giving him an idea of it have been to paint each period in a single picture, which should represent in one grand scene the stage which the work had then reached ? Each of these pictures was to the eye of Moses one *day* ; but in this one day were represented all the analogous days of that same period. The interval which separated this picture from that which followed it was a night ; and in this night were figured all other nights of the same period, during which the period which was to follow was being slowly prepared for. Thus there passed before his eyes these six pictures, representing the most characteristic phases of the entire work. He has preserved for us a memorial of these phases, but without having himself penetrated into their meanings in detail, any more than the prophets were able clearly to understand the intuitions excited in them by the Divine

Spirit.\* He only comprehended in each picture the central idea, the only one practically wanted,—that of Jehovah as the One Being, the author of each separate part of the work, as well as of the work as a whole.

We can see also from the nature of this mode of instruction, that it would be only the salient features of each period which could be admitted into these pictures and strike the eye of the seer. The vegetable and animal life, for instance, which developed itself from the first at the bottom of the sea, remained concealed from him. It was only when the vegetable life made that mighty and colossal outburst of which the carboniferous strata bear evidence, that he discerned it; for then it became the essential feature of the picture. Just so with regard to the appearance of the great marine animals and of birds, in the following ages; and so again with reference to the appearance of the terrestrial animals and of man in the last period. We are looking upon a pictorial work, and not at the work of a naturalist or man of science. Placing ourselves at this point of view, we see those difficulties vanish which hindered us from finding in this record that which so many reasons make us wish to recognize in it—the result of a revelation.

To put the seal to the agreement which we have just established between the contents of the pictures in Genesis, and the results of scientific investigation, it only remains to set these latter in the frame given us by the former, and so to combine these two kinds of results into one and the same intuition, similar to that which was produced at the moment of the vision in the mind of the seer.†

\* 1 Pet. i. 10–12.

† The following passage is borrowed in great measure from the admirable work of an English workingman, Hugh Miller, who became both one of the best geologists and one of the most brilliant writers of his country: *The Testimony of the Rocks*, pp. 187–191.

We must imagine ourselves seated with the man of God upon the mountain. Darkness surrounds us. About us and within us reigns the silence which is the precursor of Divine revelations. The prophetic sense with which all men are endued by Nature, awakes in us, and just as St. John contemplates, in his trance on the rock in Patmos, the last ages of the world, and in some sort the passage of time into eternity, so we contemplate the first days of the universe, the river of time springing forth out of eternity. In the midst of the solemn darkness, our ear perceives a muffled sound, like that of the sea agitated by a mighty wind, of which the surface rises and falls in vast undulations, and the waves at times meet and break one against the other. This is the ocean in which our earth is still enveloped as in a winding-sheet. The breath which moves it is that of the Spirit of the Creator, which broods over this mysterious egg in order to bring out of it a world of wonders, a Humanity, a Christ ! We feel that this darkness is not the darkness of the grave, but that of the fertile Night, which serves as a cradle for all life. And in this darkness of a moment are concentrated centuries without number, all the ages which elapsed from the creation of matter up to the formation of the solid crust of the globe, and the condensation of the waters upon its surface.

Suddenly, a voice breaks the silence of this long night : —

“LET THERE BE LIGHT.”

At once a luminous jet, followed by dazzling rays which radiate towards all the points of the horizon, illumines the scene. It is a radiant light, like that which from time to time illumines the inhabitants of the polar regions during their long nights of many months. By its light we discern, through the thick vapors which cover the earth, the liquid shoreless plain which surrounds us. From time

to time, gases, disengaging themselves from the interior furnace of the globe, make the waters surge and boil, and lift up to their surface a plain, which soon sinks down again, and is once more swallowed up. The jets of light lose by degrees their brilliancy, and, paling more and more, end in being altogether extinguished. We now hear nothing but the roar of the mighty waters on every side of us. Darkness surrounds us. And in this single day we have contemplated the representative of millions of days, which lit up our earth before any eye of man was there to discern them.

The voice sounds once more :—

“LET THERE BE A FIRMAMENT IN THE MIDST OF THE WATERS, AND LET IT DIVIDE THE WATERS FROM THE WATERS.”

Once more it is day ; our eyes wander still over a liquid plain which mingles on all sides with the horizon. Perhaps there may be life in the midst of this sea, life both animal and vegetable, but we do not perceive it. That which now absorbs our attention is the gradual transformation taking place in the space above the ocean. Before, the vapors rose from the sea as out of a caldron of boiling water, and the glittering light furrowed these dark water-spouts. Now the sea appears more calm ; a thicker partition separates it, no doubt, from the subterranean fire. Its tepid waters, moved by a gentle breeze, rise and fall in regular undulations. The less dense vapors rise more lightly into the higher regions, and when they there encounter a colder temperature they form themselves into thick clouds, which remain suspended all round the globe. Below this dark covering, between it and the sea, appears for the first time the transparent atmosphere, the azure firmament which divides the aerial sea from the liquid plain. Such was the second day, in the picture of which is concentrated the image of millions of days.

We are once more plunged into darkness, but not without a presentiment of the approach of a greater work still. The voice says : —

“LET THE WATERS UNDER THE HEAVEN BE GATHERED TOGETHER INTO ONE PLACE, AND LET THE DRY LAND APPEAR !”

For the third time the scene is lighted up. The canopy of thick clouds suspended around the globe is not yet dissipated. But upon the stage below, what changes have taken place ! The ocean is no longer one uniform sheet in which our eyes sought in vain for a point to rest upon. The waves dash themselves against rocks, some pointed, some dome-like. Long lines of white foam indicate the presence of coral islands, on a level with the surface of the water, against which the waves are breaking. We even perceive in the distance vast marshy lowlands. This is because, at the command of the Creator, the bottom of the sea has lifted itself up, and continents have appeared. And these new-born lands array themselves, as we look at them, with a covering of green and fresh verdure. Mosses, marsh-plants, reeds, ferns, forests of pines, and palm-trees make their appearance. These reeds, as tall as our oaks, these ferns, as large as our horse-chestnuts, wave upon the banks of rivers of dark waters, and of lakes still and shallow. Here, then, we have before our eyes, in all its luxuriant wealth, that mighty tropical vegetation, which God has preserved to our times under the form of coal.

At the bottom of these waters, life begins to stir ; coral insects are building ; innumerable molluscs crawl in the mud upon these low shores. But the prominent feature in the picture is that wonderful vegetation which we have just described ; all the rest is as nothing compared to that unparalleled apparition. But in the forests there still reigns the silence of death ; no living creature animates

them by his presence. No movement is to be seen but that of the long branches swaying in the wind, and of the thick mists creeping along the marshy lands. Such was the third day, the sample of millions of other days.

And while darkness again descends upon us, something extraordinary in the state of the atmosphere announces some new and decisive step about to be made in the divine work.

The voice of the Lord proclaims : —

“LET THERE BE LIGHTS IN THE FIRMAMENT OF THE HEAVEN.”

It is night ; our attention is directed towards the heavens. The canopy of clouds breaks, and in the intervals made by these rents, our sight reaches for the first time into impenetrable depths. New and unparalleled spectacle ! The stars shine out in the firmament. As the sky disengages itself from the vapors which concealed it these stars multiply. Soon their light gleams on all sides. The vault of heaven is unveiled in its completeness, shining without cloud over our heads. The morning-star beams, radiant as a queen in the midst of her court, and casts her pure image for the first time upon our globe. But soon she begins to pale. The vapors, scattered in light masses over the horizon, begin to glow ; they pass from gray to bronze, from bronze to gold ; the gold changes into fire ; . . . one brilliant point appears above the waters ; the Sun is come, and has celebrated his first rising. Darting into the azure sky, he enters boldly upon his course. The waters, ruffled by the morning breeze, glitter beneath his splendors. Under the influence of his brilliant rays, a new kind of vegetation makes its appearance, adorned with a thousand colors unknown to the preceding flora. A carpet of verdure, thicker and more varied, covers the dark soil of the continents. Soon we perceive the heavenly

luminary descend towards the western horizon in a glory even more magnificent than that which surrounded his rising; and for the first time, at the opposite point of the horizon, appears the second luminary of the terrestrial creation. Rising silently into the azure vault, the moon sheds her gentle light over land and sea. Such was the fourth day, an image of millions of other days. Why were the angels alone to witness it? — But through the eyes of the Seer, we, too, have been just contemplating something of its sublime beauties.

For the fifth time, night covers the picture. But the voice has again proclaimed : —

“LET THE WATERS BRING FORTH ABUNDANTLY THE MOVING CREATURE THAT HATH LIFE, AND FOWL THAT MAY FLY ABOVE THE EARTH IN THE OPEN FIRMAMENT OF HEAVEN.”

Daylight appears. Like a bride prepared for her bridegroom, the earth is adorned with flowers of varied colors. But what do I hear? For the first time a voice other than that of the Lord God, and than the sound of the mighty waters strikes upon my ear. It is as the cry of discordant voices. Birds in close ranks, like insects on a summer evening, fly above the lakes, or traverse the forests, while others of their kind, of gigantic size, as if mounted on stilts, wade through the reedy ponds, pursuing the fish.

But they themselves soon become the prey of formidable enemies. For this is also the age of the amphibious reptiles, whether swimming or flying: monsters covered with thick scales, armed with murderous teeth, haunt the long-winding rivers, or crawl upon the wet meadows, or hang suspended on the trees and rocks ready to pounce upon their prey. The ocean also is full of life. There disport themselves the giants of the age; they stir its depths with the strokes of their mighty fins, and lift above its surface their enormous forms and terrible heads. The water, the air, the

land (still marshy), all are crowded with animal life. For has not the Eternal One said : "Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven?" At this word of command all these new and unknown creatures have come into being ! — And now upon this scene, full of light and movement, the sun sets, and night veils from sight the mystery of these innumerable lives. The fifth day is over, and in this single picture we have before our eyes the spectacle of millions of days, whose light did actually shine upon our globe.

Again we are plunged into night. For the sixth time the voice proclaims : —

"LET THE EARTH BRING FORTH THE LIVING CREATURE AFTER HIS KIND."

And when the light again illumines this stage upon which the work of God was by degrees accomplishing itself, what a scene meets our eyes ! The marine monsters have disappeared. Of all these horrible amphibious creatures there remains only a small number of species, less colossal and less formidable. In their place, over the verdant plains, cattle and beasts of the field are grazing ; great herds of mastodons and mammoths seek their pasture in the fresh herbage of the forest. Ranging the woods are troops of stags and elks ; the bear watches over her young in the cave ; the hippopotamus crouches among the reeds, or plunges majestically into the river ; the rhinoceros sports in the marshes, while the lion, the leopard, and other wild animals, lie in wait amongst the dark thickets, ready to spring upon the herds of antelopes hurrying to the water. At last, at the hour when the sun sinks, and the day declines, a supreme last word is heard : —

"LET US MAKE MAN IN OUR IMAGE."

And the responsible lord of this creation, Man, formed

in the actual image of God, comes forth at the command of his Creator upon this scene which has been arranged, adorned, and peopled to receive him.

At this moment the work of Creation ceases. The rest of God begins ; but in this rest is included a new kind of work — that of the moral education of man, of his redemption and final glorification. The work of this seventh day still continues ; a day sanctified by God above all the rest, but profaned by man, as none of those that preceded it was, or could be, by the creatures whose existence they illumined. A day of which we have now perhaps reached the eleventh hour, and which will be followed for some by a day without an evening, for others by a night which shall have no morning. In this Divine Sabbath which we are contemplating in the company of the man of God upon the mount, we see also the sample of millions of other days — of all those in which we ourselves are living, of all the millions of Sabbaths of which God makes use in our time for the sanctification of the human race, and which the human race so often misuses to the dishonor of the Creator.

#### IV.

#### CONCLUSION.

LET us now sum up and conclude.

Moses had said, contrary to all probability, that light had existed long before the appearance of the sun ; Science has proved that the world may, and must, have been illumined, long before the appearance of the sun.

Moses had said, no less paradoxically, that the world of vegetation had appeared before the sun had shone ; Science

has proved that a rich life of vegetation spread over the the earth before the direct intervention of the sun's rays.

Moses had spoken of three principal appearances of organic life, one vegetable, two animal; the Science of our day discerns three great epochs of organic life — that of the carboniferous age, and those of the great amphibious creatures and mammals.

Moses had represented man as the latest-born of the creation; Science declares that man is the one, of all the inhabitants of the earth, who closed the series of new creations upon our globe.

But let us admit that all these coincidences of detail are only accidental, or that they are about to be overturned by some new step in advance, either in exegesis or in geology; there still remain three principal features in the Mosiac picture which will ever claim attention from all thoughtful men :—

I. The *cause* of all things : *God*.

II. The *order* of things : *a continual progress*.

III. The *final object* of things : *man*.

I. "*And God said!*" This is the word which gives the key-note to the narrative, the burden ten times repeated, of this magnificent poem. To *say* is both to think and to will. In this *speaking* of God, there is both the legislative power of His intelligence, and the executive power of His will; this one word dispels all notion of blind matter, and of brute fatalism; it reveals an enlightened Power, an intelligent and benevolent Thought, underlying all that is.

And at the same time that this word, "*And God said,*" appears to us as the veritable truth of things, it also reveals to us their true value and legitimate use. Beautiful and beneficent as the work may be, its real worth is not in itself; it is in the thought and in the heart of the Author to whom it owes its existence. Whenever we stop short in

the work itself, our enjoyment of it can only be superficial, and we are, through our ingratitude, on the road to an idolatry more or less gross. Our enjoyment is only pure and perfect when it results from the contact of our soul with the Author himself. To form this bond is the true aim of Nature, as well as the proper destination of the life of man.

Behind this veil of the visible universe which dazzles me, behind these blind forces of which the play at times terror-strikes me, behind this regularity of seasons and this fixedness of laws, which almost compel me to recognize in all things only the march of a fixed Fate, this word, "*And God said,*" unveils to me an Arm of might, an Eye which sees, a Heart full of benevolence which is seeking me, a Person who loves me. This ray of light which, as it strikes upon my retina, paints there with a perfect accuracy, upon a surface of the size of a centime, a landscape of many miles in extent—He it is who commanded it to shine. This atmosphere which my lungs breathe, and which is formed of two gases, either of which, by itself, would be a deadly poison to me—He it is who commanded it to give me life. This ground upon which I walk, labor, build, plant, and under which, at a very small depth, the terrible central furnace is boiling—He it is who makes it firm beneath my feet. These flowers and fruits which I gather in succession during the greatest part of the year, which delight me with their perfume, charm me with their taste, or heal me with their juices—He it is who sowed their seeds for me in this fair garden of the earth. This sun which measures out for me my years, my days, and my hours; this moon which divides my years into months, and my months into weeks—His finger it is which causes them to move through the vault of the sky like the two hands on the dial of a watch. These various creatures which fill with

life the waters, the air, and the land, and these domestic animals which make company for me even in my home—He it is who has surrounded me with them, whether to stimulate my activity by their resistance and manifold antagonisms, or to redouble it by their docile and powerful co-operation. And if, finally, I myself am here as the master-work of this creation, able to stand apart from it in thought, to rend asunder, by adoration, this chequered veil which surrounds me on all sides, and to penetrate to the heart which beats for me in a sphere at once inexpressibly exalted above me, and inexpressibly near to me; if I can greet with the title of Father, Him who counts the 140,000 hairs of my head as well as the myriads of stars which run their course in the firmament—it is because He has designed to make me in His own image, and to set within me a ray of His own Spirit.

*God has said!* In these words is, for my heart as well as for my intellect, the true worth of everything,—of my own existence.

2. The second principal feature in the Mosaic record is the homage rendered to the great *law of progress*. It was towards the end of the Middle Ages that men first began to inquire into the meaning of those marine shells which they discovered upon the high grounds of the earth. Men of science started many different hypotheses on that subject. Some said they were freaks of Nature (*lusus naturæ*); some saw in them reflections of the stars; some, vestiges of the deluge; others, imperfect efforts of the creative power. The idea of a creation which, having preceded man, had advanced by degrees from stage to stage, up to the crown of the whole work, did not occur to any one. And yet, there it was, laid up three thousand years back, in the Mosaic record!

And if this law of progress, already revealed by Moses,

reigned with sovereign power over all the developments of that unconscious existence which we call Nature, how should it not continue to control the progress, moral and spiritual, of history? Why should not a new series of "*And God said*" succeed the series to which Moses listened in his vision, and which was the spring and source of the work of the Creation? And if man does not actually perceive this by his senses, do not facts bear clear testimony to this succession of Divine commands? It is true that the creative Will has to deal in history with a new and often invincible power, that of free-will—that precious spring which it will not break, but win over and make use of. None the less surely is the end attained through long circuitous ways; and in this so different medium progress manifests itself as well as in the midst of Nature.

3. The final term of this progress in Nature, according to Moses, is man. Man, in fact, is not an individual *one* amongst the terrestrial creatures; he is the very object and aim of creation itself. Now, how should not a being so magnificently privileged continue to be the object of the solicitude and active care of the Creator? How should not this new series of "*God said*," which originates the ever-ascending movement of history, refer itself also to him?

And here a grand prospect opens before us. According to the subsequent revelations recorded in Scripture, the creative Word of which Moses speaks is not only a *spoken word* but a *speaking Word*, who was pleased to create for himself an organ of speech, just such as He himself was to God. The universe is His drama, performed for the glory of the Father; and in this drama man is the chief actor. He himself has intervened to unite himself with man, to gain him over to His cause, and make him a fellow-laborer in His Divine work. Man,

by uniting his will with that of this Word, and by making his powers agents of the creative Will, becomes, instead of a creature, himself a creator. He shows himself already such, even here below, through the magic of the arts, but that is but the prelude to the new labors to which the Future will call him. And as the prophecy of Caiaphas realized itself in the Son of man,\* so will the word of the tempter, with regard to mankind, become a reality: "Ye shall be as gods."

God said: "Let there be light." And there was light.

God said: "Let us make man in our image." And man was created.

God said: "Let eternal truth shine out in the person of man." † And Jesus appeared.

God will say: "Behold, I make all things new." ‡ And God shall be ALL IN ALL.§

Such an end is the only one which could correspond to such a beginning, as this beginning is alone worthy of such an end.

\* S. John xi. 50.

† 2 Cor. iv. 6.

‡ Rev. xxi. 5.

§ 1 Cor. xv. 28.

NOTE. — I am led in this work to this point of view : that the narrative contained in the first chapter of Genesis is the enunciation of a divine revelation. It appears to me impossible to speak thus of what one could not have seen or understood if he had not the certainty of being in possession of supernatural instruction. I am not ignorant that one may object to this manner of view, the analogies between the contents of this chapter and the Chaldean traditions contained in the cuneiform documents (compare the Chaldean Genesis by George Smith). But to a more profound study, the differences appear far more considerable than the resemblances. The Chaldean account is a *theogony*. The subdivision of the creative work into Seven periods is in harmony with the institution of the Week, as this itself rests in its turn upon the lunar phases.

Tradition in Genesis begins, it seems to me, only with what is usually called the second narrative of the Creation (Gen. ii. 4-9). Up to this passage we have a pure revelation.

As the law of Moses given upon Sinai was granted to correct, clarify, and define the natural law written in the natural conscience, so the revelation given to Moses relating to the origin of the universe has served to correct and decide the content of the ancient traditions which preceded some primary revelation, it may be, of natural reflection, and which had been brought from Chaldea by Abraham and preserved even to the Exodus of Egypt in the patriarchal families.

F. GODET.

NEÛCHÂTEL, July, 1882.

## THE HISTORY OF LIFE.

LIFE . . . who understands it? Who has seen it? It is like the goddess Isis, whose veil may never be lifted by mortal hand. We take life as a fact; we ascertain its beginning, development, end; but we cannot explain it. In treating of Life we can make history, not theory.

But what a history is that of Life! how unbounded is the wealth of the manifestations of this principle which everywhere shows itself and everywhere conceals itself from sight. To attempt to give an account of life, is it not to pretend to gauge the Infinite? All the elements—air, water, earth, are saturated with life. Throw a plumb-line into the ocean; before it has reached a depth of 230 fathoms, it will have passed through eight different fauna. Climb the heights of Java; six times in a few hours will the flora be changed as by magic before your eyes. Crumble a piece of white chalk of a pound weight; the dust in your hand will contain the remains of 10,000,000 creatures. Place a drop of stagnant water under your microscope; you will soon have discovered in it a population of infusoria of which the number equals that of the human creatures who move upon the earth. But if we confine ourselves to man, what varied systems of life we find in this one creature! what a complication of activities of all kinds in the same individual; the life of the senses, the life of the intellect, the life of the affections and desires, of the heart and of the will! Pass on from the individual to the family, to

society, — new flames issue from the central fire of life ; industrial and commercial life, the life of politics, of art, of science, of morals, of religion ! How shall we discover order in the manifestations of all these forms of life ? How discern a plan amidst this infinite multiplicity ? How measure what seems to set all measure at defiance ?

I see a way ; — it is to try to take as our standard the being who is the most complete epitome of life as we know it up to this time, in whom we behold the result of all former developments, the centre of all its present, and the probable starting-point of all its future manifestations — man.

There is a saying of a Greek philosopher, “ Man is the measure of all things.” Is not that the same as if he said : If you wish to discover the secret of the development of life, study man ; for life in general is only the expansion of that which is to be found in germ, or in compendium, in man. Let us, as an experiment, set out with this thought of Protagoras. *Cedipus* found in man the solution of the riddle of the sphinx ; let us endeavor to find in him the key to the problem of life. Let us examine his internal constitution, and see if from this preliminary study there will not spring forth a ray of light to elucidate the process of the development of life on the earth, in nature and in history.

## I.

WHAT is man ?

According to the title of this essay, our course in the study of this question is marked out for us by Nature. We have to inquire, first, what man is, according to the Bible ; secondly, what he is, according to our observations. Once in possession of the results of this twofold inquiry, we shall be able to enter upon the solution of the great question

which we have proposed to ourselves. Perhaps we may thus discover a thread to guide us through the infinite labyrinth of life.

From the point of view of Holy Scripture, man is a composite being, made up of two elements of opposite nature and origin. He is, as to his body, formed out of the dust of the earth; but in this body there exists a breath of life due to the inspiration of God himself. "God," says the ancient book Genesis, "formed man of the dust of the ground, and breathed into his nostrils the breath of life."\* The nature of the being which resulted from the combination of these two elements is described by the expression "a living soul;" and thus, continues Genesis, "man became a living soul" — words which were reproduced by S. Paul almost literally.† We see that this expression "living soul" is not applied to the breath of God considered in itself and as separate from the body, but that it describes man in his entirety, as the result of the union of the two contrasted elements. If Holy Scripture, speaking of the soul, undeniably puts it in more direct relation with the breath of God than with the body, it is none the less true that it only gives the name Soul to the first of these elements when looked at as the principle of life, and as the *animating principle* of the body (*anima*, *âme*). When that which was breathed into us is considered in itself and apart from the body, it takes the name of *spirit* (*rouach*, *pneuma*). Thus it is said in Ecclesiastes: "The dust shall return to the earth as it was, and the spirit shall return unto God who gave it." And Jesus said, after the resurrection, "a spirit (*pneuma*) hath not flesh and bones."‡ The spirit then, in the Bible, means the breath

\* Gen. ii. 7.

† "The first man Adam was made a living soul." — 1 Cor. xv. 45.

‡ Eccles. xii. 7; S. Luke xxiv. 39.

of God considered as independent of the body ; the soul is the same breath, in so far as it gives life to the body.

By this we may understand how it comes to pass that notwithstanding the essential *duality* of the nature of man, the soul, in Scripture, is often distinguished from the spirit ; \* and even how it is that when S. Paul wishes to describe the complete constitution of the human being, he places side by side these three words — body, soul, and spirit : “ And the very God of peace sanctify you wholly : and I pray God your whole *spirit, soul, and body* be preserved blameless unto the coming of our Lord Jesus Christ.” †

This is what Scripture teaches us about the internal organization of our being. What does observation teach us on the same subject ? What do I find in myself and in my fellow-beings ?

First, something which is seen by others, that is, *the body* : secondly, something which sees others, which even does more than see them, — looks, and then reflects upon what it has seen, something to which the bodily eye acts but as a window through which it looks, while itself invisible, and behind which it meditates, — *the soul*. Lastly, I find in myself something of higher nature still, an instrument by the help of which my being, penetrating beyond the veil of all that either sees or can be seen, can put itself into direct contact with the infinite Author of so many marvels. — the organ of adoration which is in me, the sense of the Divine, *the spirit*.‡

As has been said by a Christian philosopher : “ Through my body I am put into relation with nature below me ;

\* Thus, Heb. iv. 12 : “ The word of God is . . . sharper than any two-edged sword, piercing even to the dividing asunder of *soul and spirit*, and of the joints and marrow.”

† 1 Thess. v. 23.

‡ “ God whom I serve with my spirit in the Gospel of His Son.” — Rom. i. 9.

through my soul with men, my equals, around me ; through the spirit, with God above me."\* Body, soul, and spirit, — three systems of life, and nevertheless but one person, — this is man. The *ego* may be compared to a charioteer, having three horses abreast to drive ; not, however, that he is equally related to the three elements of which our complex nature is made up. During this terrestrial existence, which is the only one known to us by actual experience, it is to the soul that the feeling of personal identity seems to attach itself in man. It is in it that the *ego* dwells ; consequently it is it that occupies the central position in the life of man. The two other elements seem to be its organs, intended to connect it with two worlds, one above, the other below it. By means of the body, the soul holds communion with material and terrestrial nature ; through the spirit it comes into contact with the higher and divine world. At the same time that it receives the influences of these two spheres, of the one through the channel of the sensations, of the other through that of inspirations, it re-acts freely upon them ; on the former by means of physical labor, on the latter through the no less energetic and efficacious labor of prayer. The passage which we have quoted from Ecclesiastes is not applicable only to the last moment of human life. The body of man is at every instant in process of returning to the earth from which it was taken, to seek in it the nourishment of its forces and the materials of its activity ; and equally at every instant the spirit returns to God who gave it, in order to unite itself to Him by deep inward aspirations, to which Divine communications are the response. Hovering between these two worlds, by the help of these two organs, through which it stands related to them, the human soul is evidently so constituted as to establish between them a system of exchanges, and thus to

\* M. de Rougemont.

labor at the realization of heaven upon earth, or (which comes to the same thing) at the transformation of earth into heaven.

Observation and Holy Scripture agree then in this, — that they teach us to see in man a spirit united to a body, and which has become, by means of this union, a soul which is the centre of three kinds of life ; that of a person, free and intelligent, the life of the soul, or *psychical* life ; that of the sensations and of the organic activities, or *physical* life ; and that of the aspirations and of heavenly communion, or *spiritual* life.

From the moment of his birth man possesses the principle, or at least, the potentiality of these three kinds of life. But they only make their appearance in him successively. First, the bodily life, the eating, drinking, and sleeping of little children. Then, after some weeks of this existence, which, looked at superficially, might appear purely animal, there shines forth one day on the face of the infant that first smile of heavenly sweetness, which reveals to the mother, as she leans over him, the soul which has by degrees been awakened by contact with her own. From the beginning that soul was there, but latent ; it has only just begun to enter upon active existence, and all the richness of its future development is wrapped up in this first manifestation of its presence. At last, after an interval it may be of many years, when already the lamp of intelligence has been lit and has been casting bright beams — when the spring of the will has set itself in action with an energy which increases day by day, — one evening, after a day of happiness, or an hour of awakened affection on his mother's knees at the moment of resigning himself to sleep, the child feels his heart opening to a love richer and purer than that with which he embraces all beings known to him, even his parents themselves. Above the father

who has but just pressed him to his heart, and the mother who is even then giving him her last kiss, his eyes seek the Father of his father, the unseen Friend of his mother. And, closing his eyes, he murmurs, "I thank Thee, my God!" It is the spiritual life which has just been awakened. The organ of the Divine, which belongs to the essence of the soul, has found its object. If, in the future, its action is not restrained, and the spirit so grows in strength as to control the life of the soul which has already begun; if the soul, in its turn, succeeds in taking the government over the bodily life which is still further developed, the true hierarchy will then have established itself, and Divine order reign in the life of man.

This spectacle has been seen but once on earth, in the life of that Child of whom it was said, "And the Child grew and waxed strong in spirit, filled with wisdom; and the grace of God was upon Him."\* He increased in stature; that refers to the body. He was filled with wisdom, — the knowledge of, and the will to do, right, — that is the soul. He was open to all the influences of Divine grace; there was the spirit. In this normal subordination of the body to the soul, and of the soul to the spirit, consists the harmony, the strength, the health, the well-being, the plenitude, the perfection, the verity of human existence.

The life of each of these three elements has its peculiar characteristics, by which it can be easily distinguished from the two others. The body *is*; it is born, grows, decays, without the will having any share, properly speaking, in this progress. Physical life does not control its own actions; it pours itself forth without being its own master. It is a capital which awaits its proprietor.

This expected proprietor is the soul. The distinctive

\* S. Luke ii. 40.

characteristic of the soul, as compared with the body, is its consciousness, and its self-government by means of the intelligence and the free-will with which it is endowed. However much the soul may be solicited by sensual instincts and blind appetites, it is not governed by these lower principles, except so far as it is its will to give way to them. It can, when it chooses, resist and conquer them in the name of a higher law. We cannot say of the soul simply that it *is*, but that it is what it wills to be; it becomes that which it decides for itself to become. But if it is thus its own master, this privilege is not granted to it in order that it may alienate its own rights by self-indulgence and weakness, nor yet that it may keep itself to itself in the narrowness and stiffness of egotism, but that it may give itself up by the free and deliberate impulse of Love. Now this, its highest act, can only be accomplished by the help of the spirit.

Just as self-government is the characteristic of the soul's life, so is self-surrender that of the life of the spirit. Under the dominion of the Holy Spirit, of that breath from on high which comes to unite itself to the spirit in man, and which secures him the mastery over the soul, and through the soul over the body, there comes a time when we cry: "O God, Thou hast made me free. I can either live to myself, or give myself up to some base master. I will do neither the one nor the other. I offer myself to Thee who art better than myself, who excellest all things. Accept henceforth of my free-will as an instrument of Thine. A sacred fire of love makes me Thy servant, and, for Thy sake, the servant of all my brethren." From this moment spiritual life not only exists, but reigns supreme, in man.

Existence, liberty, holy love, these are the characteristics of the three kinds of life which are ours either

actually or potentially, and whose growth and development make up the whole sum of the life of man.

Having said this, is it possible to conceive of anything higher? Apparently not. Above simple existence there is free existence; above freedom, there is the life which, having reached the entire disposal of itself, sacrifices itself for love. Above this third form of existence we can conceive nothing,—we dare to say there is nothing, for God is Love.

Through the possession of these three kinds of life, of which the first is in contact with the lowest steps in the scale of being, the last is an emanation from the Divine essence, and the second forms the link between the two others, must not man be the summary and compendium of life in the universe? And, while discovering in ourselves these three forms of life, have we not, without suspecting it, hit upon the secret of the development of life on this our planet?

## II.

1. JUST as in man physical life is the starting-point, and constitutes the medium in which the awakening of the faculties of the soul takes place, so on our earth an immense and luxuriant development of organic life, vegetal and animal, preceded the appearance of the human soul, and prepared for the advent of the moral life.

Organic life has not existed from eternity on our planet. Geology determines for us in some measure the date of its beginning. Above certain ancient strata, which contain absolutely no vestige either of vegetable or animal life, we come suddenly, in certain rocks which crop out in different parts of the globe, upon the first remains of organized

beings ; these are algæ or crustaceans, and among the latter there is a kind bearing some resemblance to our modern wood-louse. As has been observed, the inauguration of life upon this world's stage took place in the most modest manner. To these first efforts of organized life succeeded the grand development of vegetal life, of which the carboniferous strata have preserved the remains ; rich stores which, after so many millions of centuries, still supply materials to our industry. During this period, in which vegetal organization so preponderated, animal life was slowly carrying on its upward movement. But it remained in the second rank ; its true time had not yet arrived. It was only after the disappearance of this great vegetal creation that animal life developed itself, in its turn, with a marvellous power. This it did in two successive creations. The most ancient is that of which the strata of the jurassic epoch contain the remains. The principal inhabitants of the globe in this age were amphibious monsters, such as the plesiosaurus, the ichthyosaurus, the megalosaurus ; then appeared other kinds no less strange, such as the pterodactyl. To this first great creation, which may be called the age of the saurian dynasties, soon succeeded another, of a character altogether different, of which the most distinctive representatives are the gigantic mammals of the tertiary period, such as the mammoths and the mastodons, those colossal creatures, of whom the last survivors seem to have been contemporaneous with the first men.

During these thousands of thousands of centuries occupied by the development of all life anterior to man, what do we find on our globe ? Nothing, answers Science, but the unconscious growth of the plant, the blind appetites of the animal, and the unbridled reign of sensual life ; nothing but physical birth, life, and death. Not one creature conscious of the object of its existence, or in any degree

responsible for its actions. The world is still closed to moral life.

Nevertheless, we must not suppose that no law presided over the apparent irregularities of this gigantic work. A progress may be discerned in the succession of these animal forms. They approximate, step by step, to those of the present age, and especially to the human type, which is the ideal, ruling as it were, though invisibly, all this mysterious evolution. This long poem of the creation which modern science reconstructs verse by verse, canto upon canto, obeys one single idea,— that of aspiration after man. Not one of these formations, not one of these strange creatures, but makes a step in advance towards this goal aimed at from the very beginning. Just that which in our individual life is the time passed in the womb, that process of formation during which, first as a molluscous, then an amphibious, then a vertebrate creature, our physical being works out for itself the final organization with which it is to see the light of life, such in the great work of nature has been that succession of animal forms, through which physical life has reached, by a long circuitous course, from its starting-point, the first bivalve, to its goal — man.

2. But just as in the human creature there suddenly appears, in the midst of the functions of instinctive and bodily life, as it were a ray issuing from a higher sphere, the first indication of the presence of the intelligent and free soul ; so on our planet, after the long-continued labor of vegetal and animal life, the being at last makes his appearance, who coming from another sphere, is to develop, in the midst of nature, a life independent of nature.

Man is the true Janus, the god looking two ways. On one side, he is closely connected with nature by his body. He is its *compendium* ; for, as we have just noticed, in his

embryonic state he passes through all its phases. He is its *goal*; for we cannot find any new creation in the vegetal or animal world subsequent to the appearance of man. Finally, he is its *crown*; for he is its *chef-d'œuvre*. There are, no doubt, animals stronger than man, or in which some particular organ is brought to greater perfection than the corresponding organ in man. But in no animal are all the senses taken together so harmoniously developed, and all the proportions of the organism so admirably adjusted and combined as in him. We feel that the object of past efforts has now been reached to such a degree, that all the progress of animal life hitherto, seems to have had for its highest end the elaboration of this human body, which it was Nature's mission to offer, as a perfect servant, to the free and conscious soul, its future sovereign.

At the same time that man in the phenomenon of his body closes the whole preceding work of creation, he inaugurates, by the higher life with which he is endowed, a new chapter. With the appearance of man upon the stage of the world, Nature reaches her resting-point, and History begins. The violent crises which had preceded his arrival cease by degrees. The presence of this creature of a higher world seems to have the effect of bringing peace into the theatre in which he is called to play his part. Some partial convulsions, such as earthquakes, volcanic eruptions, and a crisis of a unique nature, the deluge, alone recall the revolutions through which life had up to this time made its way. In the midst of a Nature, the forces of which are henceforth under discipline, man begins his proper work. He contemplates the world; he feels himself distinct from it; he asserts his claims as the heir of this beautiful domain, and endeavors to take possession of it by the twofold labor of knowledge and action; he "dresses the garden," according to the Scriptural

expression ; he distinguishes between different objects, and exercises his powers in giving them names ; he sets before himself aims, and finds means for their attainment ; he modifies things in conformity with his wishes and his needs ; he develops the inexhaustible resources of his intelligence and his will, — those twin-sisters, the loyal agents of all our activity. At the same time his feelings awake ; his heart opens to the sweet affections of family life, and to the pure enjoyments of nature. It is the drama of the soul's life which is now beginning. What will be its end ? Nature was ever aspiring after man, the free being ; man aspires after a perfect existence, after God. In intelligence he possesses an instrument capable of appropriating the secrets of universal knowledge ; in his free-will, the power of being holy as God is holy, and of becoming, by that means, the agent of His omnipotent will. But this aim, so far above him, is still for him lost in the dim distance. In order to reach it, it is necessary that man should surrender himself ; and in order to surrender himself, he must be his own master, and, first of all, he must conquer himself. But what is the enemy he has to conquer ? The common notion is, that the obstacle in the way of our self-government is the authority of a master who imposes his laws upon us ; and that is why man makes efforts to get rid of, or at all events to draw his attention away from, the thought of God. This is the deepest of delusions. The danger which threatens our liberty is much more truly the power of our lower nature, of our sensual appetites, of our instinctive tastes. Here is the true enemy of our liberty, which we must overcome for ourselves by a series of victories, of which each one is an act of self-denial. Let the natural inclination cause the spring of the will to give way for a moment under its pressure, and there is an end of liberty ; man is no longer

his own master, he becomes, like an animal, the slave of nature. There remains but this alternative, to be assimilated either to the gentle sheep, if his instincts are benevolent, or to the voracious saurian, if they are cruel. Created free, potentially, we ought to become so actually, by repeated victories of conscious will over blind instinct. In order to win this victory, our will needs a support, which it can only find in a law superior to that of the appetites—in the sense of duty. A state of conflict between what is right and what is agreeable is then the situation, at once dangerous and glorious, in which man must be placed if he is to become in fact what he is by destination—a being morally free. Without this actual conflict between moral obligation and nature, man would, without even suspecting the injury he was doing himself, give way innocently to his natural inclinations, and his liberty would be forever confiscated. If there is to be an education of the human race, one of the first acts of the Divine Educator will be, to provoke a struggle between duty and pleasure, between conscious will and blind instinct. This is the meaning of that primeval trial to which man was subjected. The Divine command, “Thou shalt not eat,” was a protecting fence erected by a Father’s hand to keep off instinct, and withstand its invasions. It was the safeguard of our free-will. What a crisis was here! If the conscious will, supported by the sense of duty, triumphed over natural inclination, then, set free thereby from the dominion of instinct, it would see opening before it a career of new conflicts and more glorious victories. But if, on the contrary, inclination triumphed, man’s will was reduced to slavery; and deprived, by this subjection, of the free disposal of himself, he would, under the dominion of the flesh, fall lower and lower. This crisis was then at once inevitable and decisive. It was for man,

whatever might happen, the transition from a merely natural life to historic development.

If the Bible record, which alone has preserved for us the memory of the first temptation, had not told us what have been its consequences, the grievous experience which every man undergoes of the condition of moral slavery into which we are plunged, would bring us to the knowledge of it. Which of us has not many a time made an effort to shake off the chains of egotism and self-love in which his free-will is bound, with no other effect than to make him more clearly realize their weight? Which of us has not often heard the confession of S. Paul, "I am carnal, sold under sin; . . . the good that I would I do not, but the evil which I would not, that I do," breaking forth from the depths of his broken heart? Who has not uttered the sigh with which this lamentable description of the Apostle's life, before he was made free, concludes: "O wretched man that I am! who shall deliver me from the body of this death?"\* This universal experience indicates clearly what was the result of that great ordeal with which the drama of human history opened: inclination triumphed over duty, and the will of man became its slave.

Humanity having thus fallen at the beginning of its course, and missed its proper destination, God might have extinguished it. But that would have been to retreat in presence of the enemy. God is raised too high above sin to fear entering into conflict with it. He has opened to man in his fallen state, as He would have done to man victorious, a pathway of development for his various faculties. He has Himself called into action the powers of the human soul in all directions. Man was to learn to know himself, and to dispose of himself, in the vitiated atmosphere of sin, just as he would have had to do in the pure atmosphere of virtue.

\* Rom. vii. 14, 19, 24.

For his intelligence, though obscured, was nevertheless not annihilated; and his liberty, though fettered, was not entirely lost. The noble calling of primitive man has remained in this respect that of fallen man also. Humanity seeking itself: this would have been, without the fall, and this has been, notwithstanding the fall, the inner meaning of human history since the time of Adam. The cynic philosopher looking for man in broad daylight with his lantern, is but the grotesque symbol of this sublime reality.

In Ancient History men often see nothing, and point out nothing, but a succession of monarchies mutually overturning one another; nothing but a series of bloody wars, leaving behind them cities in ruin and nations crushed or carried into captivity. Behind these mighty convulsions of the ancient world, men do not discern the real history, — that of humanity laboring at the work of laying hold of, and understanding itself, and travailing in birth of man, — the true man. As in the epochs anterior to man, behind the gigantic ferns, the voracious amphibians, and the monstrous quadrupeds, we recognize fundamentally one thing only; nature working its way up to man; so in the colossal monarchies which one after another, in the ages before Christ, filled the stage of history, — in the Assyrian-Babylonish world with its crushing military power, — in the Medo-Perian kingdom with its strong administrative organization, — in the Greek race with its incomparable artistic and scientific genius, — in the Roman empire with its powerful political centralization, — the true historian recognizes one thing: humanity striving after the full development of its manifold faculties, the complete mastery of itself and of the world, man laboring to get full possession of himself, in prospect of a destiny which he does not yet clearly comprehend, that of voluntary self-surrender.

Certainly it cannot be said that four thousand years was

too long for such a work. The human soul is a deep well ; to sound its depths requires time. Reading Plato or Sophocles shows us how energetically the consciousness of man gave itself to this task ; and when one thinks it well over, even setting aside the great confusion and entanglements brought in by sin, we shall not be astonished at this space of forty centuries granted to psychical mankind for learning to understand, and to gain the mastery over itself. But sin made this long period of preparation still more necessary. It was important that fallen man should undergo completely the humiliating experience of his condition of moral misery, and that he should learn in this severe school to recognize a twofold inability which he finds in himself : namely, first, to transform in his own strength and without a fresh gift from God, his psychical into spiritual life, even when the former is pure ; secondly, to restore his natural life to its original purity, when once it had been vitiated by sin.

But, just as in the young man who exerts in all directions the forces of his natural life, there is to be found in the deepest parts of his being a spiritual sense which aspires after a higher existence, an organ of his nature intended for intercourse with God ; so amongst mankind in the ancient world there was one nation which, while all the rest were exerting the faculties of their souls and giving themselves assiduously to the cultivation of the earth, received the higher mission of developing the spiritual aspirations which raise man above himself and the world. While the great nations of the East are giving themselves to the cruel pleasure of *conquest*, while the Phœnicians, governed by the sense of the *useful*, cultivate industry and commerce, while the Greeks are seeking to realize in their artistic and literary masterpieces the ideal of the *beautiful* and the *true*, while, finally, the Romans, following the guidance of their natural gift of practical wisdom, formulate wisely for cen-

turies to come the idea of *right*, one nation is distinguished from all this psychical humanity by a religious tendency, which makes it as it were a stranger in the earth. Its chief concern is neither conquest nor industry, neither science nor the arts, no, nor even righteousness, in the purely human sense of that word. That which occupies its life is worship; it is God's claim upon man; it is the coming order of things, in which this claim of God shall be realized in the Earth; it is Jehovah who *is*, and who is *coming*; it is His kingdom, holy and glorious, and His awful judgment. The wise men of this nation are prophets, its artists are psalmists, its heroes labor as agents of the Most High. Raised up from time to time to re-awaken in the heart of the nation that Heaven-sent longing which is the central force of its life, but which without their help would soon die away within it, these divine messengers are for Israel just what Israel himself is commissioned to be for the rest of mankind, — the embodiment, in the midst of the psychical life of the ancient world, of the religious faculty inherent in the human soul; of the *spirit* in man longing to fill itself with the spirit of God. So that while God "suffered all other nations to walk in their own ways,"\* to make them learn by experience their own inability to reach the absolute Good, He places Israel under the yoke of an education at once gentle and strong, in order to preserve it from complete subjection to the flesh. While prophecy is for this nation like the spur which makes the spirited war-horse spring forward, the law is as the bridle which teaches him to restrain his impetuous movements in view of the circumstances of the present. Heathen nations have, it is true, something analogous to this. Conscience is with them "a law written in their heart,"† and from the midst of them, as well as from the heart of creation in general, there springs a sigh

\* Acts xiv. 16.

† Rom. ii. 15.

after that state of perfect liberty, for which man feels himself to have been made. But outside of Israel these are but spontaneous and ineffectual reactions of the moral nature of man ; whilst the corresponding forces in Israel, the Law and Prophecy, are the results of a Divine education, actual and reaching its object. It is the same difference as that between an invalid under medical treatment, and one uncared for. Israel is the organ which God himself trained for the exercise of the spiritual sense in ancient humanity ; this constitutes the direct preparation for the future advent of the spiritual life ; while the heathen, left to themselves, are but a negative and indirect preparation for it.

Let us suppose man to have been without sin ; then the result of these four thousand years of preparation would have been a humanity so completely understanding and mastering itself as to be able to surrender itself, and to cast at the feet of its God the crown of a liberty which has been acquired by holiness ; and God would have immediately responded to this homage by the gift of His Spirit. Sin has not absolutely defeated this result, but it has profoundly altered the form under which it has been reached. Through a long experience of its sinfulness, humanity has understood its own inability to realize for itself its own intended destiny ; namely, to find God, and unite itself to Him. But it has none the less sighed, in the persons of its noblest representatives, for this glorious consummation. It has implored, as it were upon its knees, that Divine help of which it so profoundly felt its need. It cried by the mouth of Isaiah : "O that Thou wouldst rend the heavens and come down."\* The Spirit did not present himself to its imagination as a bridegroom imposed upon it by force, but as its betrothed, worthy of deepest

\* Isa. lxiv. 1.

love. And at the critical moment it found expression in those sublime words, in which the young Jewish heroine, as its representative, answered the Divine call: "Behold the handmaid of the Lord; be it unto me according to Thy word." \*

3. This intense longing, and this courageous self-surrender, fruit of the long-sustained working of God's Spirit upon Israel, were the seeds of the coming era — of the third phase in the history of life. The new fact which then made its appearance — the existence of the Church, indicated the advent of a new period, that of the life of the Spirit, on our earth.

St. Paul has called Jesus Christ the *second* Adam, and the *last* Adam.† There is a great wealth of thought for the heart and mind of the believer in these two epithets. As the first Adam had constituted the close here below of the development of physical life and the opening of that of the life of the soul, so Jesus Christ closes the development of psychical life, and inaugurates the advent of the life of the Spirit. Adam was a living soul, cast by God into the midst of the convulsions of nature, to bring into the physical creation, order, harmony, and peace. Jesus Christ the *life-giving Spirit*, comes from heaven to calm the tempests of the human soul. He brings order and harmony into the exercise of our faculties, and in our individual life, domestic and social, He makes the serenity of Divine order reign.

This second Adam is also the last Adam. There is, after Him nothing higher to look for, "That eternal life which was with the Father, was manifested unto us," ‡ says St. John. Jesus is the Divine life realized in man, and offering itself, in an accessible and tangible form, to be participated in by all that is called man; "*the Word* was

\* S. Luke i. 38

† 1 Cor. xv. 45, 47.

‡ 1 John i. 2.

made *flesh*." \* To drink of this fountain is to partake of the Divine Life in the measure in which it is accessible to the creature.

How did this supreme Life make its appearance? How did it develop itself in a man? How did it communicate itself to mankind?

It was under the most modest forms, as we have seen, that physical life first made its appearance upon our planet. It was also under circumstances of the deepest humility that the advent of the life of the Spirit took place, in the person of Jesus Christ. A manger received the little Child in whom that treasure was virtually contained; a carpenter's shop was the witness of the labors of the growing Boy; by Baptism, the symbol of impurity and death, He passed from youth into the stage of manhood, and that was also the means through which He entered upon the higher sphere which it was His mission to open to all others; an upper room, its doors shut for fear, was the centre whence the new life streamed, and whence it has been propagated since the day of Pentecost through generations and centuries.

This new life only grew by degrees even in Him who was the first depositary of it, and who is forever its eternal principle. Assuredly He was master of himself at the moment when, by His incarnation, He gave us His Divine person as a gift. This act of self-devotion, the type and source of all Christian self-devotion, was that of a free being. But, once a man, He was, like all other men, subject to the law of moral progress; and in order to gain self-mastery, even He had to begin by conquering himself. This was his work during the thirty years He spent in the obscurity of Nazareth. He was searching into His own nature, and foreseeing what He should be. In the Holy

\* S. John i. 14

Scriptures He saw prefigured His person and His work ; in them He traced the outlines of a mission which He perceived to be His own. It was as a sealed letter, an instruction drawn up beforehand by His Father, which was not to be opened till He was in open sea, in the midst of the struggles and storms of His earthly existence. From the part of His life which is known to us, it is easy to argue that the parts which are unknown were not free from painful trials. The prayer which ever accompanied the tears He shed for the sins of those around Him, was one of the principal commentaries which made Him by degrees understand those sacred books which were so full of Him.

Thus did He reach the time of His moral maturity. During these first thirty years He had, as it were, recapitulated in himself all the labor of human kind in the preceding ages. The moment when this work of preparation was completed was that in which the voice of John the Baptist called upon all the people to purify themselves by baptism, in order to prepare for the near approach of the kingdom of God. Jesus, by participating in this sacred rite with His people, brought into it what He had acquired, or rather what He had in his own person become, through His whole preceding development ; the psychical man complete, the pure and living temple for which the Holy Spirit was looking, that He might therein descend into humanity. If Jesus was in himself the sum and crown of the whole preceding life of humanity, considered morally and intellectually, more especially was He the expression of the Jewish conscience, of that exquisite moral sense which was the fruit of the discipline of the Law, and of the ardent aspirations kindled in men by the word of prophecy. And when, at the moment when Jesus descended into the Jordan to receive, himself, in His own way, His consecration to the kingdom of God, and the depths of His heart

opened, and His prayer went up to heaven, heaven made answer; the Spirit of God descended without measure upon this unique Being, whose mission it was to communicate Him to mankind. That is a beautiful thought which is put by one of the apocryphal Gospels into the mouth of the Holy Spirit at this moment: "My Son, in all the prophets I have been looking for Thy coming, that in Thee I might find My rest; for Thou art My rest. Thou art My first-born Son who reignest for evermore."\* Immediately, under the impulse of the Spirit, with Whom His own will had just identified itself, Jesus made himself an offering, first to God, by His victory over the temptation in the wilderness; then to Israel, by His earthly ministry; lastly, to the world, by His expiatory sacrifice; realizing thus the most generous and the most complete act of self-surrender ever accomplished by human being, or that can possibly be conceived. Absolute self-devotion to that which is greatest, — God; and at the same time to that which is meanest and most abject, — the worst of sinners; such is human life as we behold it in Jesus, and as by a Divine act He has been able to make it in His own person. And this is indeed that spiritual life of which by nature the human soul possesses the capacity, the feeling, the presentiment, and instinct, but which it never succeeds in realizing, except by that wedded union with the Holy Spirit which first consummated itself in the Christ.

After having realized this, the highest form of life, Jesus re-ascended into His glory, not to abandon humanity to itself, and leave it nothing but the sweetest and purest of memories, but to labor at raising it to Himself, by pouring upon it, from out of His own glorified existence, that perfect life which He has himself realized here

\* Gospel of the Nazarenes, quoted by Jerome.

below.\* The scene of the effusion of this spiritual life is the Church, which is therefore called *the Body of Christ*.† The atonement completed by Christ gives to all a right to the Divine forgiveness; and the forgiveness thus obtained gives to each a new claim, the claim to the possession of the Spirit. Since the day of Pentecost, Jesus has never ceased granting this highest favor to every one who can press his claim upon Him. After having expended upon us His earthly lifetime in the course of His ministry, shed for us His blood in His death, He by His Spirit makes us sharers in His own glorified and living personality. The Holy Communion is the visible expression of this supreme gift. But the possession of the Spirit is so profoundly one with our own personal life, and presupposes so complete a surrender of our whole being, that it must imply an absolutely free act of our will. Accordingly, God, who did not ask our consent when He was pleased to bestow upon us the life of our body and that of our soul, because these gifts were as yet only the *vocation* to the higher gift, acts with more reserve when about to bestow this last benefit. He limits himself to *offering* it to us when the favorable moment has arrived; that is the object of the preaching of the Gospel, through the instrumentality of the Church and of the ministry which she nurtures in her bosom. If there be a Church constituted objectively, it is in order that the Spirit should be offered to all, while yet not forced upon any one. Each of us has received the gift of earthly life solely with a view to this higher destination — to receive through the Spirit the only life worthy of the name. If our souls are free and intelligent, it is that they may become voluntarily the abodes and agents of the

\* S. John xvii. 2: "As Thou hast given Him power over all flesh, that He should give eternal life to as many as Thou hast given Him."

† Eph. i. 23.

Holy Spirit, and, through Him, of Jesus Christ glorified. If there be in us a man, it is in order that that man may manifest himself in the likeness of the Man-God.\* To thrust away from us this life of the Heavenly Christ, in order to keep our own psychical life, amounts to this, — that when the doors of a palace are opening before us, we choose to shut ourselves up in a prison. Or rather, it is an act of suicide of the most senseless and cruel kind. To surrender ourselves to the Spirit is to find ourselves; but in His presence to keep ourselves for ourselves is to be lost. Jesus said this in those words often repeated by Him, which express the ultimate law of every life which is truly human: "Whosoever will save his life shall lose it, and whosoever will lose his life for My sake shall find it.†

4. During innumerable centuries, physical life had been freely displaying itself in Nature. In Adam was formed a bridge between this first form of existence and one more excellent, that of the free soul. During forty centuries did this latter form carry on its evolution in mankind of old. Then at last came Jesus Christ, who effected the transition from the life of the soul to one more perfect still — that of the Divine Spirit in the human soul. For two thousand years, the flame of this spiritual life has been burning in the Church, propagating itself in every direction, wherever it finds in mankind the material needed for its support. Have we reached the end? Is possibility exhausted? It would seem so; for no higher form of life than that which Jesus realized in himself, and which He communicates to us from heaven, is conceivable. And yet, if it were so, the cycle would not be closed. No

\* Rom. viii. 29: "Conformed to the image of His Son, that He might be the first-born among many brethren." V. 17: "Heirs of God, and joint heirs with Christ."

† S. Matt. xvi. 25.

development whatsoever is completed until, having reached its closing stage, it takes up once more its beginning, in order to lift it to the same height. There is a profound saying, "The future is but a return to the past."\* Arrived at the summit of spiritual life, it is with no look of disdain that man turns back to contemplate the lower stages of existence through which he has ascended. Even the mere physical life with which he began, inspires him with no feeling of shame. Does not that also bear the impress of a Divine wisdom? Contempt for the body is no sign of a true and healthy spirituality. Jesus, set free from His body by death, did not leave it forgotten behind Him. He reclaimed it from the sepulchre, and restored it to life by the Resurrection. Even at the Ascension, on re-entering His original life of Divinity, He did not depose, but transformed it, and fitted it to become the organ of Omnipotence, and of that Divine life into the possession of which He was about to re-enter; "*In Him dwelleth all the fulness of the Godhead bodily*," says St. Paul.† Was it not one purpose of the transfiguration to give us a presentiment of this mystery of glory? If a grown man cannot contemplate unmoved the cradle in which his eyes first saw the light, the child of God, having reached the state of holiness, will not despise the body in which his soul first awoke to the light of individual consciousness, and in which, at a later period, his spirit became a partaker of the heavenly life. Even here below, when the Holy Spirit has made a temple of the human body, does He not ennoble its features? Does He not illumine its expression, renew its failing strength, and give support to its weakness? Now in the human body there is contained a germ, which begins to grow, through our union with the Holy Spirit, amidst the very

\* M. Charles Prince, Professor in Neuchâtel College.

† Col. ii. 9.

dissolution of the body. So will that new organ of the spirit form itself, which St. Paul in his bold manner of speech calls the *spiritual body*. In the same way that our earthly body is here below the organ of the soul, which is the seat of our personality, so will the spiritual body be the organ of the *spirit*, when that shall have become our personal life. "There is," says St. Paul, "a natural body (alive with the life of a soul), and there is a spiritual body," (serving as an organ to the spirit).\* Now, if by His action on this mortal body, the Holy Spirit already at times works wonders even here on earth, what will He not make of the new body, His own creation, His masterpiece? St. Paul compares our present body to a "bare grain," and the future body to the plant, perfect in form and color, which springs from this imperfect germ dropped into the earth. How great, then, will be the splendor and vitality of this spiritual body!

But this is not all. As in our present body we see the two systems, animal and vegetable, which are around us, converging, and in them Nature, as it is on earth, in its entirety; so will the future body be the centre of a nature renewed and glorified, freed from the law of vanity and death. The ideal after which are instinctively yearning, not men only, but, as St. Paul says *all creatures*, will be realized. And physical existence, so coarse in appearance, which has been the spring and source of life on our planet, being taken up as its fellow-worker by the power of the Spirit, shall become the glorious theatre of the activity and of the virtues of its new master, the spiritual body.

Matter is not necessarily the prisoner of the spirit, nor a hinderance to its operations. We see this in the supple and, as we might say, omnipotent hands of the artist; we see it in the instrument by which he effects such

marvellous results. Now art is but the prelude to that glory which is one day to become the crown and splendor of holiness.

To sum up what has been said. On the theatre of Nature, unconscious life has been exercised, a slave to the senses. On the stage of history, the human soul has displayed the riches of life self-conscious and free. In the Church (understanding this word in its most spiritual sense) there grew up, and has since developed itself, a new thing,—the life of holy love, realized in Jesus Christ, and by Him communicated to us. Finally, in that supreme abode which we call heaven, this perfect life, divine in its essence, human in its form, will expand and radiate through matter then glorified. Such is an outline of the development of life, as we may conceive it by adapting our own observation of facts to the Scriptural revelations. How can we contemplate without admiration this plan, conceived before time was, and of which the magnificent result is to bring time back to eternity? How not recognize here the thought of Him who is “wonderful in counsel, and excellent to working?”\* How resist crying out with the Psalmist, “Lord, how great are Thy works, Thy thoughts are very deep?” St. Paul has summed up this divine plan in those few words, the key to the riddle of man’s history, and the text of all Christian philosophy: †

“FIRST THAT WHICH IS NATURAL;  
AFTERWARDS THAT WHICH IS SPIRITUAL.”

\* Isa. xxviii. 29.

† 1 Cor. xv. 46.

## ANGELS.

THE subject which is now to occupy us has its attractions, but also its dangers. The veil of mystery which enshrouds it constitutes its attraction. The danger to which we are exposed in treating it, is that of putting our trust, while upon ground which belongs to things divine, in a guide not adequately qualified, imagination.

In order as much as possible to avoid this danger, we shall endeavor to draw from Nature any inductions, and from History any analogies which they may offer ; then, putting these results into connection with those contained in the book of Divine Revelation, we shall seek to throw light upon these several sources of knowledge by comparing each with the other. Might I but succeed in rescuing this interesting subject out of the obscurity in which it is lost in so many minds ! It is no doubt a secondary, but still an important, part which these beings, who are to be the subject of our study, play in the grand drama of the work of God upon earth.

Four points will require our attention : —

1. The existence and nature of the angels.
2. The manner of their development.
3. The relations in which they stand to each other.
4. Their relation to us.

The existence of angels cannot be questioned by any one who holds fast to the contents of the Bible revelation. But for any one who rejects these revelations, or who hesitates

to accept all that they teach, may we not find some reasons fitted to induce him to admit the real existence of an order of beings in some respects superior to man?

We see before us on earth three orders of living things — plants, animals, men. If we once arrive at the perception that these three classes of creatures are the first steps of the ladder in a system of beings, of which the fourth and final step, though missing in *fact* here on earth, is none the less imperatively demanded as necessary in theory; would it not follow from this, with great probability, that this superior order which is thus indispensable to the harmony of the whole, does really exist in some domain of creation inaccessible to our present faculties? This is precisely the conclusion for which we are about to plead.

Let us notice the relation in which the individual stands to the species in the three orders of living things which are before us in Nature, and we shall see whether this relation does not lead us naturally to suppose that that superior order which we have imagined must exist.

In the vegetable world, species only has any proper existence; the individual specimen is but its representative, nothing more, nothing less. If we put a rose into the element proper for its growth, it will there become that only which any other rose would have become if placed under the same conditions. Language applies to individuals in the plant world the term *specimens*. This is because they are to the species what the several impressions of a photograph are to the *negative*, which they reproduce precisely. Thus, properly speaking, there is but *one* rose, — the *species* rose, which lives on, and is continually re-born in the transitory apparitions by which it becomes visible to us. A plant may be compared to some single and indivisible property, where each part-owner lives upon the whole and for the whole. In the plant world the individual as such has no existence, but the species only.

In the animal world the species is still the essential thing, but the individual has already now become an independent reality by the side of, and above it. Individuality begins to show itself above ground ; but, nevertheless, the animal is governed by instinct. Now what is instinct but the power of the species manifested in the individual ? Subjected to this blind and irresistible law, the individual is incapable of drawing from its own being an act of free-will, or of making a resolution which shall be properly its own. Hence the absence of responsibility, and hence also the want of progress in the animal world. The lion of our day does exactly what his ancestors did, and what his descendants will do in the remotest future. If man does not hold out a helping hand to him by training, the animal will tread over and over again the circle marked out for him by instinct. The individual lives, it is true, but as the slave of species. His gaoler does, indeed, allow him to take a few steps in his prison-yard, but never to leap its walls.

The transition from the animal to the man is marked by a complete reversal in the relations of the individual to the species. The latter does still exist in man. We speak, not without reason, of *human kind*. Each man owes his existence to his parents, and it is that which constitutes species. With men, as well as with animals, species is that primordial, obscure, mysterious material, out of which each individual being shapes itself. But — and herein consists the reversal of the relation — the law of instinct, even while exerting its power in man, does not govern him absolutely. Instinct is his first master, but by no means his eternal tyrant. Man can struggle against his natural appetites ; he can even, with the help of conscience and reflection, overcome the solicitations of his lusts, and sacrifice them on the altar of moral obligation. The prisoner can force the doors of his cell, and escape out of his prison. And because he can,

he ought to do so. The individual only becomes properly a man, in proportion as he exercises this glorious prerogative. If he neglects to do so, he remains on the level of the lower animals, and ends by even surpassing them in brutality. He is punished by becoming a victim to those instincts over which he was intended to rule. From this faculty of self-government springs the power of progress in mankind. Instinct—the cradle and temporary guardian of the individual—gives but the starting-point to his development. Once he has broken down this barrier by an act of reflective will, man sees opening before him a pathway of progress towards perfection, both for the individual and for the race.

We see, then, that species is not extinct in man, but the individual has power to free himself from its bondage, and it is his noble mission to reach the dignity of personality by subjecting the promptings of a blind and natural instinct to the higher claims of morality. Man is no longer a mere specimen of a class, he is a person.

On comparing these three forms of existence which we perceive in nature around us, there would appear to be evidently a law by which the preponderance of individuality bears an ever-increasing proportion to that of a species. In the first stage, individuality has no existence; in the second it does exist, but is still in bondage; in the third it comes forth free, and able to effect its entire deliverance from species. May there not be a fourth state, superior even to this last, and rendering the whole system complete?

In the science of mathematics, if three terms are given, we can make out the fourth with perfect certainty. The two middle terms, being known, enable us to argue from the first to the last which is unknown. May we not then say in like manner that, among living creatures, animals and

men are the two middle terms by the help of which we can rise from the first term of the series, the plant, to another and still unknown one, the very opposite and complement of the first, that is, the angel?

Having established the fact of these three forms of being; species without individuality; individuality under bondage to species; species overpowered by individuality—what have we remaining for the fourth form? Evidently, individuality without species. This formula, which seems at first sight strange to us, yet, on reflection, points to and describes a method of existence much more simple than our own: an order of beings, amongst whom, species having ceased to exist, each individual owes his existence no longer to parents like himself, but immediately to the creative will. Should we not then have exactly the angel?

This method of existence is precisely that which is attributed to these mysterious beings in Holy Scripture. In speaking of us, the term *son of man* is frequently used, but the angels are called *sons of God*, never sons of angels. Why should this be, except for this reason, that they owe their existence to a direct act of creation, and not to the ordinary means of descent? In the most explicit revelation which we have in Holy Scripture on the nature of angels, our Lord makes a remarkable comparison between the angels and the saints in glory. "The children of this world," He says, "marry, and are given in marriage; but they which shall be accounted worthy to obtain that world, and the resurrection from the dead, neither marry, nor are given in marriage. Neither can they die any more; for they are equal unto the angels; and are the children of God, being the children of the resurrection."\* This declaration of our Lord gives us four very remarkable data upon the nature of angels: 1st. They have

\* St. Luke xx. 34-36.

bodies, since the resurrection bodies are to be like theirs. 2d. These bodies do not owe their existence to the ordinary process of filiation, but to an immediate act of creation ; for they are compared to the bodies with which the souls of the faithful will be re-clothed at the time of the resurrection. It is in virtue of this resemblance that both alike are to bear the name "*sons of God*" in the life to come ; "they are the children of God, being the children of the resurrection." 3d. The conjugal relation will no longer exist for glorified men, any more than it exists for angels. 4th. This enfranchisement from the conjugal relation corresponds in both cases to the exemption from death. Do not, then, the exact contents of this declaration of our Lord agree, as closely as possible, with the conclusions at which we have arrived in our observations on the living creatures known to us in Nature ?

So far, then, as our inductions are well grounded, and that we believe our Lord was speaking of a subject on which He could pronounce with authority, we may now consider the question of the reality and of the nature of angels as settled and pass on to the second step, that of trying to discover what is the manner of development of these beings.

## II.

WE see, then, a ladder or scale before us ; on the bottom step of it we have species without individuality ; next above that, individuality in species ; one step higher, the individual detaching himself from species ; and at the top of the scale, the individual without species, that is, the angel. Below this scale of living creation, and as it were the ground upon which it rests, we have inanimate matter without either

collective or individual life ; and at an infinite and immeasurable height above, the Being from whose hand it is suspended, and in whom both individual and species are but one, that is God. The angel, then, has his place marked out and distinctly definable in the system of Nature. Can we find out something of his history? And first, with reference to the body.

The imagination of painters has clothed angels in graceful bodily forms. Do not let us materialize too much on the one hand by giving literal wings and feet to these beings, but neither let us reject the idea too contemptuously, for, as we have just seen, they have really a bodily organism, though different from our own.

If, then, they have a body, they must have a habitation. Where is it? Can it be that the angels form the population of the star-lit sky? In this way one might explain the double sense of the expression so often used in Scripture, "the Lord of Hosts," which would appear to mean both the Lord of the stars and the Lord of angels. This interpretation, too, gives a meaning to the petition in the Lord's Prayer, "Thy will be done in earth, as it is in heaven." It may be, however, that there are superior spheres of existence distinguished from those in which we live, less by distance in space than by a difference in nature and quality. When Jesus said of those whom He called "these little ones," that their angels do always behold the face of God, that is to say, that they are the beings nearest to His throne, we must not, therefore, imagine to ourselves these angels as living half-way to the *nebulæ* above our heads. They are at once higher and lower ; higher, since they are said to be so near the throne ; lower, in that they are in some ways connected with those weak creatures who are the most in need of protection on this earth. The heaven which they inhabit is not then topographically distant

from our own sphere. It may be that it is diffused throughout it in the same manner as the impalpable ether pervades tangible nature.

As to the moral development of the angels, we know, in the first place, that they are free beings. This follows from the high place which they occupy in the scale of living creatures. Unfettered by the laws of species, and consequently not under the dominion of blind instinct, the angel must be even more free than man, who has to drag after him the heavy chain of collective existence, and of the involuntary solidarity of his species. Now one characteristic of all free existence is temptation. No sooner was man placed in the scene of his future activity than he was made subject to this law. The power to obey or to resist is the first gift of God to a free being, as soon as He has made Himself known as the giver of his existence, and of all the benefits which accompany it. And what is human life but a series of trials, out of each of which we emerge either more freely dependent, or more obstinately rebellious?

To surrender ourselves or to refuse to do so, to confirm from the motive of love our state of dependence, or proudly to deny it, it is in this that that progress in good or evil consists, to which the perilous prerogative of free-will forces us. If the angels are free as we are free, or even more completely so, they cannot escape from the state of probation.

We know in what the trial of man consisted. It was adapted to the initial stage of his existence, to his then infantine condition, and to his instinct of enjoyment. Shall we now endeavor to lift the veil which conceals the trial, doubtless of a very different kind, to which the angels were subjected! No, we have but to call to mind that for man himself there exist more subtle and dangerous

temptations than those of the flesh ; temptations of a kind purely spiritual, such as proceed from self-love, self-will, the love of praise, the abuse of intellectual superiority, the substitution of self for God in the interior worship of the soul. Now temptations of this kind are more conceivable in any being, in proportion as he is endowed with a more spiritual nature, and with more of liberty and of personal independence.

We know that the trial of the angels has taken place. Holy Scripture makes known to us the result of it, though without telling us in what it consisted. This result differs in one very material point from that in our own case. With us the race altogether is fallen, just because we are a race, and in that method of existence, the fate of all the individuals is bound together, at least according to the order of nature. Humanity is like a single tree with many branches ; cut the trunk, and each branch is as completely severed from the root by that one blow, as if it had itself been struck. The case must be quite different where there is no race, no filiation, no species. The angelic host, instead of resembling a tree bearing a multitude of branches, may rather be compared to a forest, composed of a number of trees, each independent of the others. With the angels, then, trial may have had different or opposite results in different cases. And, according to Scripture, we find that this possibility became a reality. It tells us of certain angels, that they "kept not their first estate, but left their own habitation ;" \* that they "abode not in the truth ;" † while to others is given the title of "holy angels," ‡ and "elect angels." § The former, then, have abjured the law of their existence, the will of their Creator ; that is to say, they have made their own will the principle of their actions.

\* Jude 6.

† John viii. 44.

‡ 1 Tim. v. 21.

§ St. Matt. xxv. 31.

They have thus fallen from the sphere of truth, which is only in God, into that of falsehood ; their existence has become factitious, they oscillate unceasingly between illusion and imposture, alternately deceived and deceiving. For there exists no support outside of their own being to which they can attach themselves. They no longer possess God, from whom they have separated themselves, and with whom the faithful angels are still in communion ; neither can they enjoy the world, with which the nature of their organs does not allow them to communicate directly,\* — that world which forms a temporary compensation for sinful men who have lost God. They live and act in the void of their own subjectivity ; a void which they ever seek to people with their own lying creations. The only consolation they have for the loss of God consists in fighting against all that is good and true, and in seducing other free beings, whom they seek to drag with them into their own feverish activity, purely negative, and constantly powerless.

The *holy* angels, on the contrary, in conforming to the will of God, have become sharers in His power and in His truth ; they are happy instruments in His hand, in that particular sphere of the universe over which each of them is set. Accordingly, the extraordinary operations of Divine power in the region of external things are attributed to them, and the Son of man speaks of His miracles as of “angels which ascend and descend.”† The reward of their willing submission is to be really what they were destined to be, and what their name expresses,—*angels*, or *messengers* from heaven, the agents of God. In God they possess at once both the guaranty of the reality of their existence, and that of their activity.

\* All the more do they seek to do so indirectly, through the medium of the human beings by whom they contrive to gain access to it. Hence what are called *possessions*.

† St. John i. 51.

## III.

IN what relation do these beings stand to one another? Do they form a hierarchy? Are they united by any kind of organization?

Nowhere upon earth do we find complete equality; and the higher we ascend in the scale of being, the more marked do we find the superiority of some, and the subordination of others. Three forms of inequality are very distinctly marked among men, which are scarcely to be found among inferior beings; in family life, the natural superiority which belongs to parents; in the State, that which belongs to rank; in society in general, that of influence.

The first of these three forms of superiority can have no existence among the angels. As regards the second, St. Paul speaks of *thrones, dominions, principalities, and powers*, all which terms seem to point to different degrees of a hierarchy. And as regards the superiority which results from personal influence, we can affirm that, even without the testimony of Scripture. For do we not find everywhere among men some who are subject to influence, and others who exert it? Human society may be compared to a pyramid, on the lowest steps of which stand the multitude, which have, strictly speaking, neither thought nor will. Next above them are those whose function it is to reproduce and publish, while themselves possessed of a certain amount of power, the word of command given to them from above. At the summit, in a narrow space reserved for a small number of elect souls, are arranged the real geniuses, those who open out new horizons to the minds of men, and new paths for their activity. These are the true potentates of humanity; burning and shining lights like Luther, or consuming

fires like Voltaire. If this is the case among men, how much more must it be so among the angels, who are superior to us in intelligence and liberty. First, at the base of the pyramid are the angels, properly so called, or messengers; these are, perhaps, those whom Holy Scripture calls *powers*; above them the *principalities*; then the *dominions*; which unite under their sceptre different groups of angels, of ascending degrees of importance: and, at the summit, there are the *thrones*, or, as Scripture also calls them, *archangels*, or chief among the angels.

Three among these latter, Scripture designates by name, two among the elect, one among the fallen angels. The two first are called Michael and Gabriel, names which express in human language the offices which they fulfil in the Creation of God. The meaning of the word Michael is: *Who is like unto God?* In him we behold the being who is placed at the very summit of the scale of living creatures. One thought and feeling alone absorbs him, and makes the sum of his being—that of the immeasurable distance which separates him from the Creator. Himself at the very summit of all, he feels more than all others his own nothingness. Zeal for the glory of God, whom he adores whilst veiling himself, is the spring of his activity, the very principle of his existence. From this feeling arises the nature of the work he has to do, which is to overthrow everything that dares to make itself equal with God, or to oppose itself to Him, Paganism in particular, under all its various forms. In the Old as in the New Testament, Michael appears as the protector of Israel, and the champion of Monotheism, (of which this people was the depository,) and as the vanquisher of Satan and the destroyer of his works. This archangel thus fitly preludes the final work of the Messiah as the *Judge* of the world.

The meaning of the name Gabriel, the second archangel

of light, is *the strong man*, or *God's hero*. In him we see the active executor of God's designs for the salvation of men. Whilst Michael is occupied in overthrowing all that opposes God, Gabriel hastens the realization of his plans. It is he who appears to Daniel to announce to him the return from the captivity, and to fix the time for the still distant advent of the Messiah; it is he who, in the New Testament, announces to Mary the birth of the Saviour of the world.\* Gabriel is the heavenly *evangelist*; he preludes the work of the Messiah as the *Saviour* of the world.

If, then, there are chiefs among the elect angels, it is but natural that there should also be such among the rebel or fallen angels.

The only being of this kind whom Scripture specifies by name, is he who is called *Satan*, — this name, which means *the adversary*, is drawn from his relation to God, — and *the devil*, which means *calumniator*, or *accuser*, and is drawn from his relation to men. The power which Holy Scripture attributes to this being in his fallen state, is a testimony to the greatness of his position, and the excellence of his faculties before his rebellion. Besides, there is one fact which proves this; he dared to measure himself, as it were, in single combat with the son of God. When he says to Him, while showing Him all the kingdoms of the world, "All this is delivered to me," there is no authority for thinking that he was not speaking the truth. Moreover, Jesus has elsewhere confirmed this assertion in calling him more than once, *the prince of this world*. Did our earth, then, once make part of the domain originally assigned to this monarch? Was it his fief? Did he legitimately exercise authority over it until the day when he tried to make himself lord instead of vassal? However that may be, he still inhabits a sphere superior to ours, but not far removed from it, which St. Paul

\* Dan. viii. 16; ix. 21. St. Luke i. 19, 26.

speaks of as *heavenly places*. \* It is from thence that, with a multitude of other beings like himself, and swayed by his influence, he exercises up to this present time an unlimited power over that portion of mankind to whom Christ's beneficent influence has not yet extended.

It has been sometimes maintained that the mention of these superior beings, both good and bad, in Holy Scripture, has been borrowed from the Babylonish and Persian religions, with which the Israelites came into contact during their captivity in the countries of the Euphrates and the Tigris. But in these religions the number of the archangels is always seven, not three. This number seven, which bears a relation to the number of the ministers of the Persian kings, we find, doubtless, in the Jewish documents subsequent to the Babylonish captivity. But Holy Scripture shows itself independent of these fables. Moreover, the two principal angels of light whom it brings before us, already appear as the companions of Jehovah at the time of His visit to Abraham, in the book of Genesis, written a long time before the Babylonish captivity. And as regards the archangel whom it reveals to us as the Prince of the kingdom of darkness, it does not make him a god, as do all the religions of the East, but a poor created being, trembling in the presence of God,† and so much the more miserable as he had, in his former state, been richly dowered.

Here then, as elsewhere, the Bible maintains that independent character which guarantees to us the originality of its sources.

\* Eph. vi. 12.

† Zech. iii. 2. S. James ii. 19.

## IV.

WE now arrive at the question which most concerns us ; that of the relation which angels bear to human beings. Perhaps an analogy drawn from history may throw some light upon this delicate question. Until the advent of Jesus Christ the Israelites seemed separated by an iron wall from all other nations. The Greeks and Romans occupied the foreground of the scene, but Israel, in its retired and isolated position, appeared to bear no relation to those great actors in history. Nevertheless, a deeper study makes it apparent that on many points the progress of these nations was parallel with that of the people of God. History had progressed simultaneously with the ever-increasing influence of this unique people, until at last the moment arrived when, the barrier having fallen, the two streams, Jewish and Pagan, were reunited. It was in the Church that this confluence, which constitutes the close of ancient history, was effected. It had always been intended and predicted. From the very beginning God's purpose was the realization of the unity of the human race by means of the Gospel.

There is a unity even vaster than that of the human race, and not less positively decreed by God ; that of all the beings who make up the moral universe, the *kingdom of heaven* in its fullest extent. Just as in the old world, God was preparing that first fusion which dates from the advent of Jesus Christ ; so is He now, in this present economy, ever working to prepare for that far greater and richer unity, which will be consummated at the glorious re-appearing of the same Jesus Christ.

It needs but to open one's eyes, to perceive the relations

which unite the development of our race with that of those beings of whom we are now treating, relations which fit our human history into a grander whole, that of the great universal history. The temptation and the fall of the first man, and up to a certain point, the creation even of humanity, are the first events which attest the relation existing between the two spheres. If Satan was really, in his original state, the monarch to whom was entrusted the government of this Earth, and if the condition of man was that which is implied in the Divine command : Have dominion over the earth and over all that moveth upon it,—there is but one conclusion to be drawn from these facts, that is, that from that time God substituted man for Satan as the lord of the world ; and that the place He intended for man in creating him was that of a successor and a rival to Satan.

Satan was a revolted vassal, and God gave his domain to another. Man received the mission to conquer it by superiority, not of strength, but of obedience. From this point of view we understand the eagerness with which Satan has from the first labored to draw men away from submission, and into complicity with his rebellion. What could be more attractive to a rebel than the hope of causing the army sent to overcome him to turn, and to make himself its leader against that very power who had raised it against him ?

But what avail the stratagems, and even the victories of Satan against the designs of supreme Wisdom ? The defection of humanity, the *chef-d'œuvre* of diabolic cleverness, has only served to exhibit in a more striking manner the grandeur of the Divine plan.

Through the sin of man, it is true, Satan has become provisionally the master of this earth ; he has even gained one more subject. He who was to have taken away his

empire is become his ally and his slave ; and what degradation has he not ever since inflicted upon his unhappy captive ! With what heavy chains has he not loaded him ! Idolatry with its shameful practices, war with its bloody horrors, death with its inexpressible anguish, sin, above all, with its baseness and remorse ; behold in all these the monuments of Satan's power over humanity, the trophies of his victory over our Earth.

And what does God do ? Does He at once crush in His fury His adversary and ours ? That would not be to conquer him. In a combat such as this, it is necessary to confound in order to conquer ; and to confound is to show oneself not the stronger but the better.

Do you see that little Child lying in a manger ? Here is the new Champion whom God has chosen, and whom He will from henceforth oppose to the Prince of this world. Satan, himself a creature, had aspired to the independence and to the glory of a god. God detaches from himself a mysterious Being, another self, who willingly despoils himself of His condition as God, and reduces himself to the dependence and nothingness of a created Being. The archangel made himself God ; the Son of God makes himself man ; the Word becomes flesh. Under the humblest form of human life, He acts out that absolute submission to God, which had been refused both by the archangel and by the first man. Satan feels now a principle in humanity which resists him ; he hastens to the spot, for he perceives that his power is being threatened.

As once before he had triumphed in the garden of plenty, so now he hopes to do in the desert of privation. But this time he has met with his vanquisher. Jesus remains firm in spite of all his suggestions and his offers ; He persists in referring all to God ; the preservation of His bodily existence, the means of establishing His kingdom on earth,

the time when He should perform His miracles, all are referred to God. The whole of His subsequent ministry is only a confirmation of this unreserved submission, to which He devoted himself in the wilderness. And after He has consummated His expiatory and redeeming work, He is at last crowned and enthroned as the new Sovereign of the earth. It is a change of dynasty ; \* the world passes into the hands of another master. Satan is deposed, and his rights of sovereignty are transferred to Jesus Christ, who in His turn transfers them to mankind, His family, in whose name, and as the representative of whom, He has fought, obeyed, conquered.

Such a transference is possible, in virtue of the solidarity of the species which is the characteristic of humanity, and which distinguishes it from angels. Inasmuch as it forms one species, humanity can be saved altogether by One. Such a method of salvation would not be applicable to the fallen angels, who have only an individual and no collective existence. Accordingly it is said that "Christ took not on Him the nature of angels, but the seed of Abraham." †

From that moment Satan and his followers have maintained a desperate fight against this new power, which was to be substituted for theirs. From the *heavenly places*, those superior regions where they still live, and from whence they exert their influence, they endeavor to hinder the Gospel and its progress throughout the world. But has not Christ so arranged as to make His cause one and the same with that of God? Therein is the sure guarantee of his final victory. The throne of the adversary is abased in proportion as His is exalted. It is easy to see what must be the effect of this double movement.

What part do the holy angels take in this work which God is effecting in the heart of humanity? A part both con-

\* S. John xii. 31.

† Heb. ii. 16.

templative and active. They had once hailed with joyful acclamations the creation of man: as Job says, "the morning stars sang together, and the sons of God shouted for joy" when man first made his appearance on the earth. Later on they were the assistants and servants of those prophets whose ministry and whose visions prepared for the coming of the Saviour. As soon as Jesus himself appeared, they surrounded him like a band of devoted messengers, ascending and descending at His orders, instruments of the Divine intervention in the physical world, as the Holy Spirit is of the work of salvation in the inner sphere. At the moment of the consummation of the Eternal Sacrifice, they looked down into this depth of mystery, and sought in vain to fathom it. Finally, they were the first to make known the Resurrection, as they had been the first to announce the Nativity.

Ever since the foundation of the Church, their attention has been fixed upon this masterpiece of Divine love. They contemplate it with adoration, as a work greater than nature, a creation more glorious and enduring than that of the six days. As St. Paul says: "To the intent that now unto the principalities and powers, in heavenly places, might be known by the Church the manifold wisdom of God."\* Upon this spiritual stage the angels contemplate with an ever-renewed rapture the manifold means by which the Father brings to the Son the hearts of sinners, and saves that which had been lost. And there is joy amongst them each time that an ineffable smile, passing over the face of the Father, makes known to them that one of his children who had been dead is now restored to life.

While thus contemplating, they learn, they grow, they rejoice, sometimes also they weep, and always they adore. But they do more than this. Once they were agents in the

\* Eph. iii. 10.

history of the Master : now they are so in that of His Church. "Are they not all ministering spirits, sent forth to minister for them who shall be heirs of salvation?"\* The greatest among them do not disdain to keep specially close to the weak, and to the lowest amongst the faithful.† Jesus himself declares this to us, without, however, giving us any right to infer from these words that each human being has an angel personally attached to himself.

But of what use, you will ask, is this intervention of angels ? Cannot God help us by His providence and by His omnipotence, without having recourse to these created ministers ? Assuredly He could do so : but to be consistent, you must also ask, Why does the new-born infant, on its entrance into life, find loving hands to care for and to tend it ? Could not God clothe and nourish it himself by His power ? Or, again do you ask, Why, in the danger through which you have just passed God saved your life by means of one of your fellow-men, instead of doing so by His own Hand ? The reason is, that it is not God's will that that bond, so full of sweetness, which forever unites the benefited to his benefactor, should exist only between Him and ourselves. The love of God is great enough to make Him wish not to love, or to be loved alone. He values love, which is the very essence of His being, too highly not to labor by every means to multiply it between all the beings He has created, as well as between himself and them. This is the aim and end of all His dispensations, negative and positive. His love for all, that of all for Him and of all for one another, makes the glory of His kingdom. And this is why it is His will that we should all help one another, and that this relation of mutual assistance should exist even between angels and men. Thus He prepares for the time when these two races, more widely differ-

\* Heb. i. 14.

† S. Matt. x<sup>iii</sup>. 10.

ing than Jews and Gentiles, shall be closely united in His kingdom, and shall form but one body.

Finally, in the end of time, this relation between men and angels, first contracted at the Creation, and made more intimate during their development, will be sealed by a supreme event. On the one hand, S. Paul says that men "will judge angels,"\* i. e., holy men will judge the rebel angels; on the other hand, the angels will sift the tares from the wheat among mankind, garnering up the former, and burning the latter: such is the declaration of Jesus. †

And after each of these two classes of beings shall have thus rendered homage to the Divine holiness in the presence of the other, the end of God's dispensations to both will be realized. He who has determined to "gather together in one all things in Christ, both which are in heaven and which are in earth," ‡ will join both men and angels in one under this single Head.

As, then, the two great streams in the old world, Jews and Gentiles, after successive approaches, were at last united in the Church, so the two great classes of beings of whom the moral universe is composed, men and angels, after being brought into a series of beneficent relations with each other, will submit in concert to the sceptre of Jesus Christ, the Creator and Lord of angels, the Creator, Saviour, and Lord of men, the Judge of all.

It seems, then, impossible for us to set aside the belief in the existence and agency of angels as a point of no importance. We are led up to this belief by the inductions of Nature, by the analogies of History, and by the teachings of Scripture. And who does not feel how much, from this point of view, the domain of the Divine work is extended before us, and the sphere of light enlarged? In the same

\* 1 Cor. vi. 3.

† S. Matt. xiii. 39.

‡ Eph. i. 10; Col. i. 20.

way that the sight of the star-lit heavens enlarges infinitely our conception of the physical universe, so does the belief in the existence of angels give the character of infinity to the idea we form to ourselves of the kingdom of God. And how can we avoid perceiving at the same time how much this belief is fitted to give vividness to our terror, and to deepen our horror of evil? Does it not make us see in every temptation a trap laid for us by a mortal enemy, and in every sin we commit a complicity not only criminal but senseless, with a hateful and malevolent being? Finally, do we not feel how much this belief tends to exalt the person of our Redeemer, and to enhance His work? He is not only the Head of mankind, whom He has saved by His sufferings, but also of the angels, to whom He gave existence, and whom, from the midst of His glory, He leads to perfection.

That was a magnificent duet which resounded in the Church when, for the first time, the believers from amongst the Jews, and the converts from among the Gentiles, united their voices to sing the new song, the hymn of salvation. They both celebrated the marvellous works of God, but each in his own manner; the former praising Him above all things for His *faithfulness* in the fulfilment of the promises made to their fathers; the latter publishing His *mercy* towards the people to whom He had promised nothing, but who, whatever might be their unworthiness, had notwithstanding received all.\* It will be a hymn set for two voices, even more rich and sublime, with which the elect angels and glorified men will celebrate, together, the work of God, but in differing tones; the former with that rich and sonorous voice, of which nothing has ever marred the purity, announcing the faithfulness of the Most High which so magnificently rewards their own faithfulness; the latter,

\* Rom. xv. 8, 9.

in a graver tone and more restrained accent, as becomes beings whose song is born amidst tears, glorifying the grace of Him who can blot out even unfaithfulness : those, setting before us men, by their example, that ladder of light upon which it is possible to ascend to God without once departing from the truth, to attain to perfection, not without trial but without falling, to realize progress in pure good — thus glorifying the holiness and the truth of that God who does not permit that sin should ever appear to be necessary, or even in itself useful ; and, on the other side, we men responding to them, and pointing in deep humility to the dark abysses of sin into which we had thrown ourselves, but from which the Hand of God has drawn us by unparalleled marvels — thus glorifying in their eyes that grace which “ where sin abounded did much more abound,” \* and which, in thus transforming even evil into good, has accomplished the greatest of all miracles. From the midst of the two races, henceforth to form but one, there will then rise, in varying tones, that united hymn (last word of the history of free beings), of which the song of the angels and of the shepherds, on Christmas Eve, was the prelude : “ Praise be to God and to the Lamb who sitteth upon the throne ! Alleluia ! ”

\* Rom. v. 20.

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